

Lodderhose, John
Bp8627

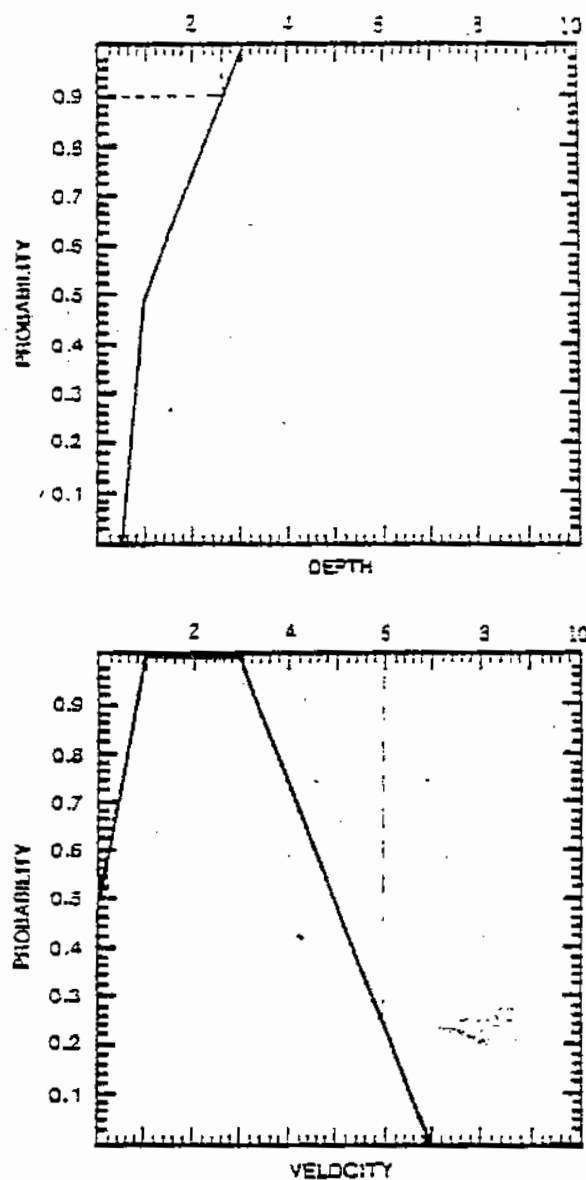


Figure 1. Probability-of-use curve for stream fishing (boat non-power) in relation to depth and velocity.

Table 3. Total surface area of stream and (weighted usable surface area) for a hypothetical recreation activity in square feet.

Depth (ft) and (Probability- of-use)	Velocity in feet per second and (probability-of-use).				Total
	<0.5 (1.0)	0.5-1.0 (0.8)	1.0-1.5 (0.4)	>1.5 (0)	
<1 (0)	500 (0)	400 (0)	100 (0)	0 (0)	1,000 (0)
1-2 (0.3)	600 (180)	700 (168)	800 (96)	300 (0)	2,400 (444)
2-3 (0.8)	100 (80)	300 (192)	500 (160)	100 (0)	1,000 (432)
>3 (1.0)	0 (0)	0 (0)	100 (40)	0 (0)	100 (40)
Totals	1,200 (260)	1,400 (360)	1,500 (296)	400 (0)	4,500 (916)

A separate matrix is required for each recreation activity being considered. A separate matrix is also developed for each of a number of different flows and a different weighted usable surface area is calculated for each flow. Comparison of the matrices provides information on the "best flow" or shows the change in weighted usable surface area due to a change in flow.

RECREATION CRITERIA FOR THE INCREMENTAL METHOD

Recreation activity definitions and a discussion of criteria are presented below.

Minimum and Maximum Criteria

Criteria, as discussed in this section, refer to the parameters of depth and velocity, and deal with the minimum and maximum values. The assumption is made that the recreation activity in question cannot be engaged in outside of the range described by the minimum and maximum values. Optimum values are determined in a somewhat different manner and will be discussed later. Minimum and maximum criteria are of two major types: (1) physical criteria and (2) safety criteria. Regarding

Lochlerhose, John
Bp 9627

physical criteria, recreation activities have certain physical or absolute limits or requirements which must be met (i.e., a boat requires a certain minimum depth of water to float). In the case of safety criteria there are no absolutes; however, it can generally be stated that certain depths or velocities may be unsafe for the average participant. Safety criteria may also be considered a preferred physical limitation.

Optimum Criteria

Minimum and maximum criteria are used to establish the range of depths and velocities which provide a usable surface area for river recreationists. It is also possible to identify a preferred depth or velocity or range of preferred depths and velocities which could be called optimum. Obviously, optimum will not be agreed upon by all recreationists since they represent such a heterogeneous group. However, the total range can be narrowed and a preferred range established. An optimum value of depth or velocity or a preferred range of depths and velocities will be that value or range of values which is usable to the largest number of potential participants.

There are "psychological" criteria that also might be used for selecting optimum depths or velocities. Psychological criteria relate to the quality of the experience. However, in order to evaluate the quality of the experience, one must determine what experience is sought. A number of the recreation activities included in this report have expectations that appear to be unrelated to flow. Therefore, for such activities only the physical and safety criteria need to be considered. Other activities have flow-related expectations and it appears that the experience desired and expected should be a part of the criteria. According to Schreyer and Nelson (1978) the "white water" activities, have an "action-excitement" expectation, and certain types of water are necessary to realize that expectation. Stream depths and/or velocities which produce action-excitement are not easily identified because of the differing skill levels and experience of recreationists. Consequently, psychological criteria, in terms of depth or velocity, are not listed at this time.

The activities which have action and excitement as an expectation are the last four activities listed under boating (below). However, not all of the persons who engage in these activities seek action and excitement. Therefore, a wide range of optimum velocity values is necessary to include the action excitement expectation as well as the other expectations. Each of these four activities may be viewed as two separate activities, one which occurs on tranquil water and one which occurs on non-tranquil water.

Recreation Activities

The stream-oriented recreation activities considered in this report are shown below:

<u>Fishing</u>	<u>Water Contact</u>	<u>Boating</u>
Wading	Swimming	Sailing
Boat, power	Wading	Low power
Boat, nonpower	Water skiing	High power
		Canoeing-Kayaking
		Rowing-rafting-drifting
		Tubing-floating

Definitions.

Fishing

Wading: fishing while walking in the stream.

Boat power: fishing from a power boat.

Boat nonpower: fishing from a nonpower boat.

Water Contact

Swimming: propelling oneself through the water with no, or only occasional, contact with the bottom.

Wading: walking in the water, including water play.

Water skiing: being towed behind a boat on skis.

Boating

Sailing: wind powered boating.

Low power: power boating, motor less than 50 horsepower.

High power: power boating, motor greater than 50 horsepower.

Canoeing-kayaking: using a canoe or kayak in a river.

Rowing-rafting-drifting: using a row boat, raft, or drift boat in a river.

Tubing-floating: floating on a device which is not a full-sized boat or raft. May include inner tubes, small rafts, air mattresses, etc. This activity is also a water contact activity. It is placed here for its similarity to rowing-rafting-drifting.

PROBABILITY-OF-USE CURVES

Development of recreation probability-of-use curves builds upon the recreation criteria discussed in the previous section. Minimum, maximum, and optimum criteria are translated into probabilities-of-use and recreation probability curves are developed.

Lodderhose, John
Bp 10 of 27

The recreation criteria may be graphed with depth (or velocity) on the X axis and the desirability of certain depths for the recreation activity in question along the Y axis (Figure 2).

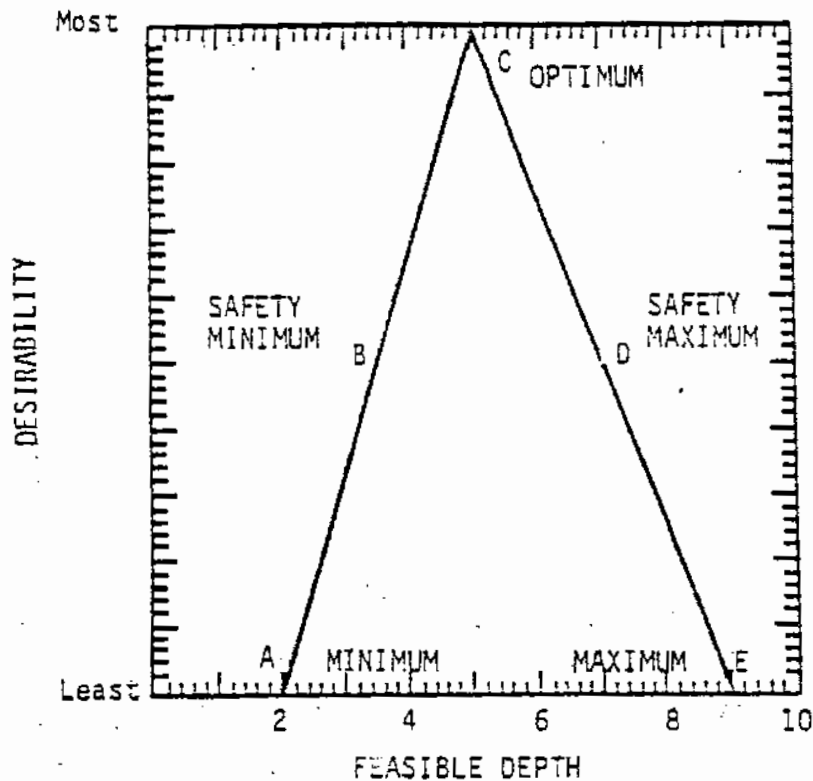


Figure 2. Desirability of stream depth graph for a hypothetical recreation activity.

The physical minimum is shown on the graph as "A" and is the least desirable depth at which the activity is possible. Preferred low flows are the least depth at which the activity can be participated in safely is shown as "B" on the graph. Safety values are somewhat arbitrary because they depend upon experience and skill of the recreationist. In this context, it is assumed that it is an average figure, and that up to 50 percent of the potential participants will find depths between "A" and "B" usable. Point "C" on the graph indicates the most desirable or optimum depth and it is assumed that 100 percent of the potential parti-

cipants would find such a depth usable. Point "D" indicates the preferred or safety maximum and "E" indicates the physical maximum.

If the Y axis is changed from a desirability scale to a probability scale, with 1.0 on top and 0 on the bottom, the "probability-of-use" may be read off the Y axis.

If Figure 2 represents a probability-of-use curve for an activity in a region where the resource is experiencing capacity use, then the following assumptions can be stated:

1. Areas having depths less than "A" or greater than "E" will have no use.
2. Areas having depths equal to "C" will be experiencing capacity use.
3. Areas having depths equal to "B" and "D" will be experiencing 50 percent of the use of area "C."

Appendix A sets forth the depth and velocity criteria in tabular and graphic forms and defines depths and velocities in terms of desirability as follows:

Optimum	Depth or velocity usable by all; probability-of-use or weighting factor 1.0
Acceptable	Depth or velocity between safety limit and optimum; probability-of-use or weighting factor 0.5-0.99
Marginal	Depth or velocity between physical and safety limits; probability-of-use or weighting factor 0.01-0.49
Unacceptable	Depth or velocity unusable; probability-of-use or weighting factor 0.0

Appendix B shows the probability-of-use curves which are developed from the depth and velocity criteria.

APPLICATION

There are situations where the single cross section method or the incremental method is best suited to do instream flow studies.

The single cross section approach is best suited to situations where:

Lodderhose, John
Bp 11827

1. A minimum of time is available.
2. A low flow recommendation is all that is necessary.
3. The low flow recommendation will be exceeded for most of the recreation season.

The incremental method is best suited to situations where:

1. Increments of flow need to be analyzed.
2. The change in streamflow needs to be related to change in recreation potential.
3. The most "exact" answer, available with today's state-of-the-art, is desired.

Opportunities for preserving instream flows for recreation may occur within several programs and processes. Planners did not always take advantage of these opportunities in the past because no method existed by which to quantify the instream flow need.

Opportunities exist within the State water adjudication procedures wherein all water rights will be adjudicated including the Federal reserved rights. When the purpose of the Federal reservation of land includes recreation, the quantity of water necessary to accomplish the purpose must be quantified, and this includes the instream flow required.

Both Federal and State wild and scenic river programs contain language that may be used to preserve instream flows for recreational or aesthetic purposes. The licensing and relicensing procedures of the hydroelectric utility companies call for exhibits to be prepared which describe the recreation resource and the benefits to the public from such a license or project.

Whenever a water project is proposed the impact of the project on recreation is studied. The incremental method will permit the stream portion of such analysis to take its place alongside the reservoir portion.

Use of the incremental method will permit full consideration of recreation by water management agencies as they make decisions about water allocation, conduct hearings for diversion permit requests, or determine low flows.

In general, whenever proposals are made which will change an existing streamflow or flow regime, the impact upon recreation can be determined and be considered in the planning process.

LIMITATIONS

The limitations of the methods discussed in this paper should be understood prior to field testing.

The single cross section is limited to making minimum flow recommendations to accommodate the boating recreation activities. It is less exact than the incremental method and the location of the cross sectional measurement is critical.

The incremental method may be used to describe the impact of a change in flow or used to identify an optimum flow. However, there is no such thing as an optimum flow or flow regime for recreation. Each recreation activity has its own unique flow requirement and frequently flow requirements conflict among activities. For example, a greater flow resulting in higher velocities may benefit the white water boaters, but would all but eliminate fishing while wading. Usually a flow recommendation would be provided in terms of a flow regime. The recommendation of a flow regime would recognize the variable supply of water throughout the year as well as the periods of greatest demand for instream water. A flow regime for recreation would take into account the greater recreation demand during the recreation season, during the weekends, and perhaps even during the daylight hours.

Use of the incremental method can provide only a measure of recreation potential and cannot provide adequate information for developing a recommended flow regime based on the demand for recreation. If such a recommendation is necessary, or if knowledge of a change in recreation use or benefits, due to a change in flow, is desired, a demand-supply study should be undertaken. A demand-supply study would use the output from the incremental method as the supply component.

Lodderhose, John
B p12 of 27

REFERENCES

1. Schreyer, Richard and Martin L. Nelson. 1978. Westwater and Desolation Canyons: Whitewater River Recreation Study. Institute for the Study of Outdoor Recreation and Tourism. Utah State Univ., Logan, UT. 164 pp.

Lodderhose, John
Bp 13827

INSTREAM FLOW INFORMATION PAPERS ISSUED

1. Lamb, Berton Lee, Editor. Guidelines for Preparing Expert Testimony in Water Management Decisions Related to Instream Flow Issues. Fort Collins, Colorado, Cooperative Instream Flow Service Group, July 1977, 30 pages. (NTIS Accession Number: PB 258 597; Library of Congress Catalog Card No. 77-83281).
2. Lamb, Berton Lee, Editor. Protecting Instream Flows Under Western Water Law: Selected Papers. Fort Collins, Colorado, Cooperative Instream Flow Service Group, September 1977, 60 pages. (NTIS Accession Number: PB 272 993; Library of Congress Catalog Card No. 77-15286).
3. Bovee, Ken D., and Cochnauer, Tim. Development and Evaluation of Weighted Criteria, Probability-of-Use Curves for Instream Flow Assessments: Fisheries. Fort Collins, Colorado, Cooperative Instream Flow Service Group, December 1977, 49 pages. (NTIS Accession Number: PB ; Library of Congress Catalog Card No. -).
4. Bovee, Ken D. Probability-of-Use Criteria for the Family Salmonidae. Fort Collins, Colorado, Cooperative Instream Flow Service Group, January 1978, 88 pages. (NTIS Accession Number: PB ; Library of Congress Catalog Card No. -).
5. Milhous, Robert R. and Ken D. Bovee. Hydraulic Simulation in Instream Flow Studies: Theory and Techniques. Fort Collins, Colorado, Cooperative Instream Flow Service Group, May 1978, pages. (NTIS Accession Number: PB ; Library of Congress Catalog Card No. -).
6. Hyra, Ronald. Methods of Assessing Instream Flows for Recreation. Fort Collins, Colorado, Cooperative Instream Flow Service Group, May 1978, 49 pages. (NTIS Accession Number: PB ; Library of Congress Catalog Card No. -).

Lodderhose, John
Bp 14 of 2

APPENDIX A

CRITERIA DEVELOPMENT

Sources of Information Used to Develop the Criteria of Appendix A:

1. Christiansen, M.L. 1975. Development of Resource Requirements Determinants for Selected Activities. Watershed Recreation Research Report.
2. Scott, J. and R. Hyra. 1977. Methods for Determining Instream Flow Requirements for Selected Recreational Activities in Small and Medium Sized Streams. Paper presented at AWRA Conference, Tucson, Arizona.
3. Thompson, J. and R. Fletcher. 1972. A Model and Computer Program for Appraising Recreational Water Bodies. Department Forest Sci. Utah State Univ., Logan, Utah, pp. 48.
4. U.S. Bureau of Outdoor Recreation. 1977. Recreation and Instream Flow. Volumes 1 and 2, Jasen M. Cortell and Associates, Waltham, Massachusetts. pp.252.
5. U.S. Bureau of Outdoor Recreation. 1977. Resource Requirements for Water Related Recreation. S.E. Regional Office. Draft Report. pp. 15.
6. U.S. Corps of Engineers. 1963. Channel Improvement for Navigation Snake River Downstream From Weiser, Idaho. Detailed Project Report. pp. 77.

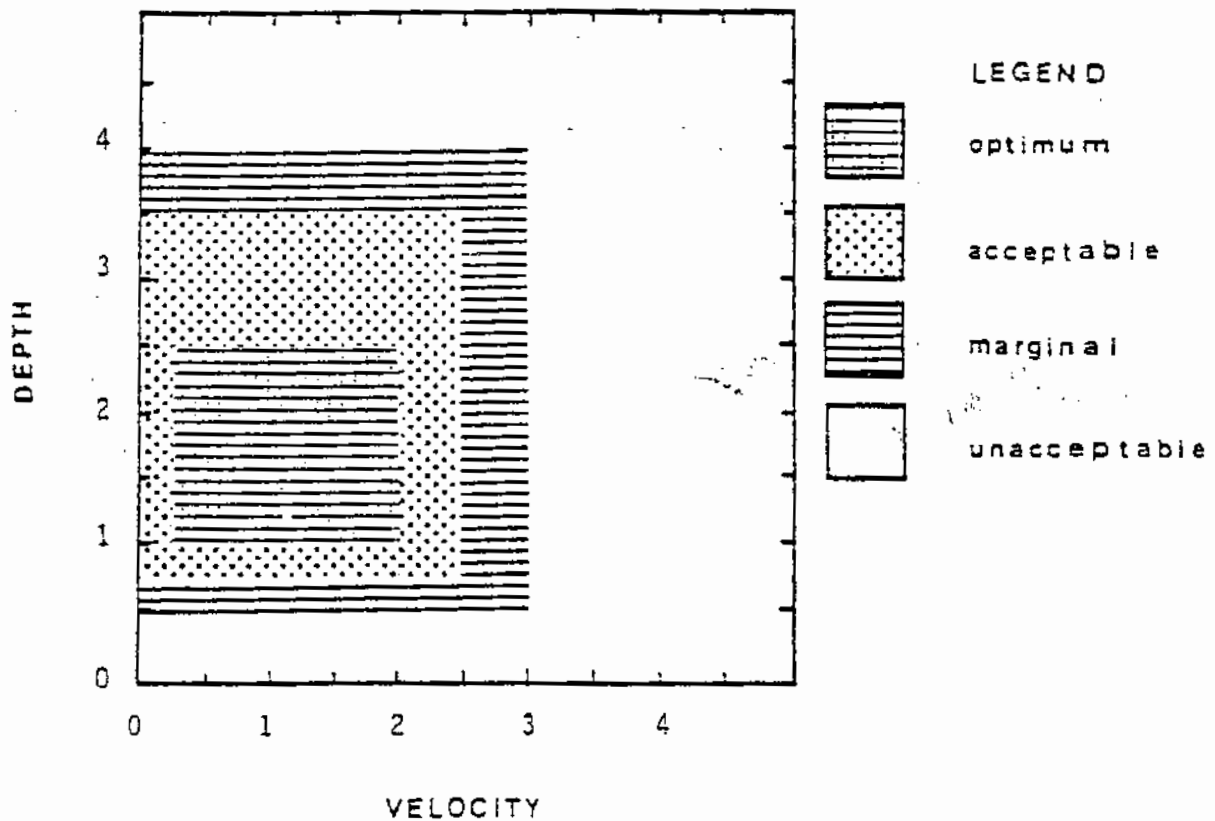
Lodderhose, John
Bp15827

FISHING WADING

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			1.0-2.5 ft
minimum	0.5 ft	0.75 ft	
maximum	4.0 ft	3.50 ft	
VELOCITY			0.25-2.0 fps
minimum	0.0 fps	0.0 fps	
maximum	3.0 fps	2.5 fps	

COMMENTS: Depth in ft multiplied by velocity in fps should equal 10 or less. Safety depends upon height and weight of individual as well as substrate type.

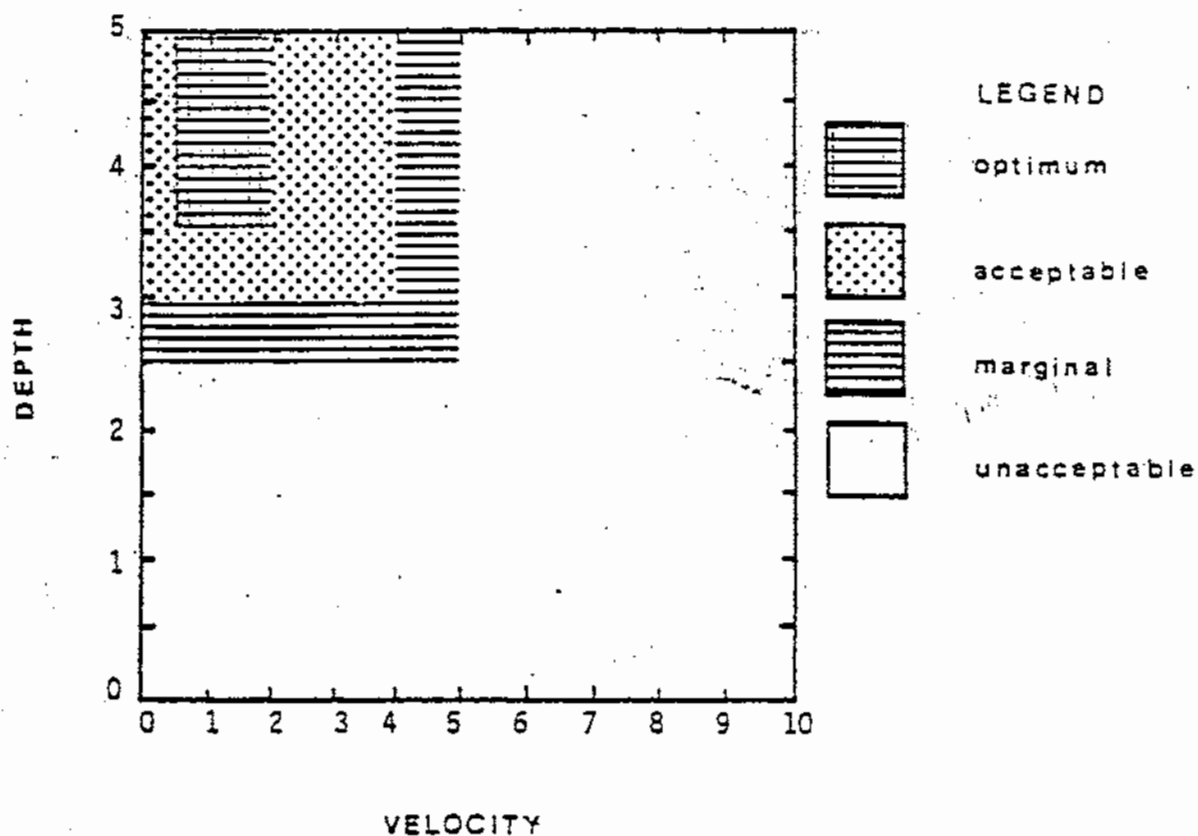


FISHING BOAT POWER

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			3.5 ft +
minimum	2.5 ft	3.0 ft	
maximum	NA	NA	
VELOCITY			0.5-2.0 fps
minimum	0 fps	0 fps	
maximum	5 fps	4 fps	

COMMENTS: Size of boat and motor important. Generally includes boats of low power.



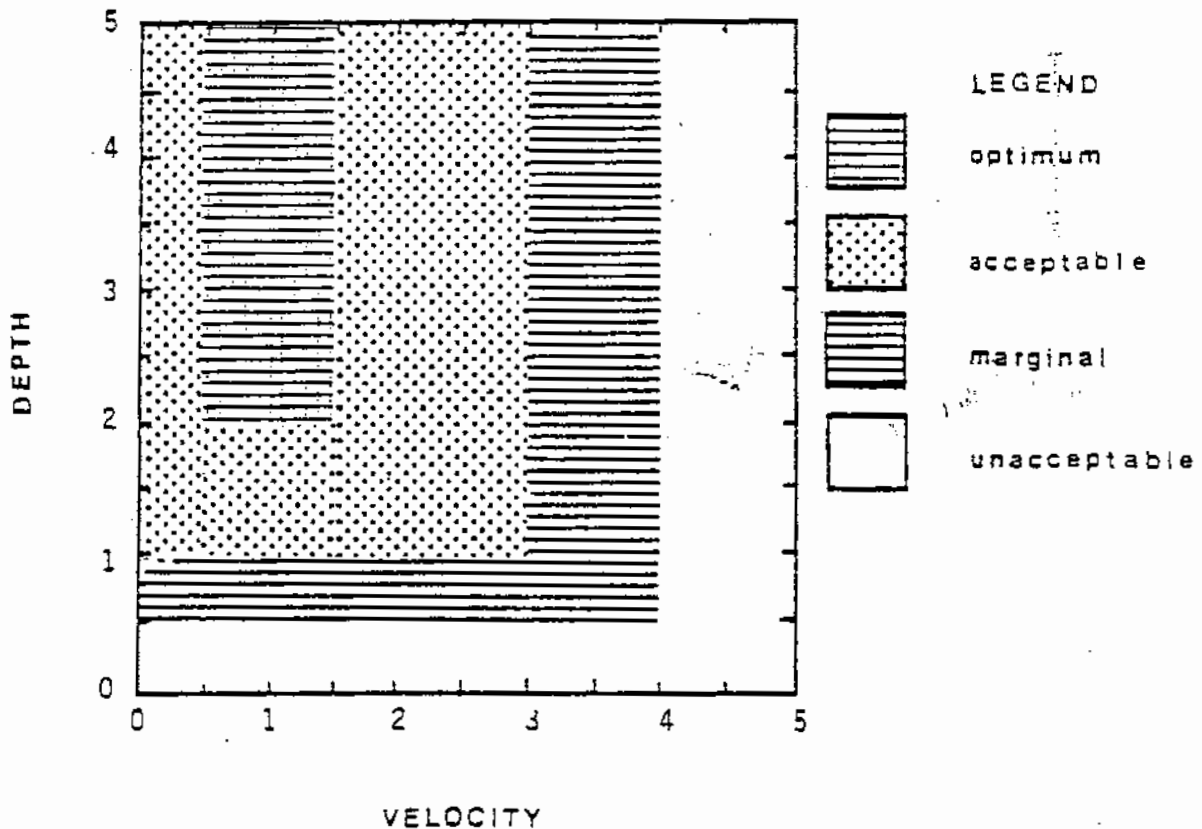
FISHING BOAT NON-POWER

Lodderhose, John
B p 16 of 27

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			2.0 ft +
minimum	0.5 ft	1.0 ft	
maximum	NA	NA	
VELOCITY			0.5-1.5 fps
minimum	0 fps	0 fps	
maximum	4 fps	3 fps	

COMMENTS: Type boat important.

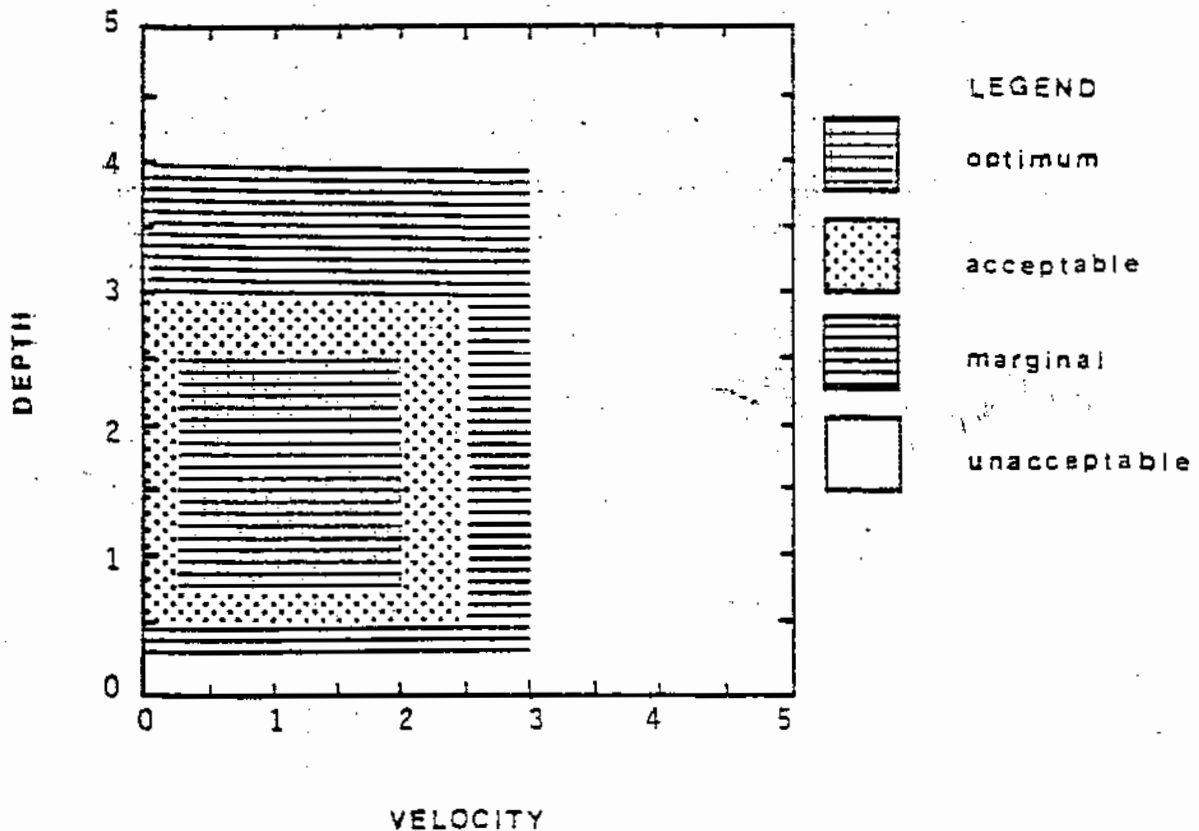


WATER CONTACT WADING

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			0.75-2.5 ft
minimum	0.25 ft	0.5 ft	
maximum	4.0 ft	3.0 ft	
VELOCITY			0.25-2.0 fps
minimum	0 fps	0 fps	
maximum	3.0 fps	2.5 fps	

COMMENTS: Depth in feet multiplied by velocity in fps should equal 10 or less. Safety depends upon height and weight of individual as well as substrate type.



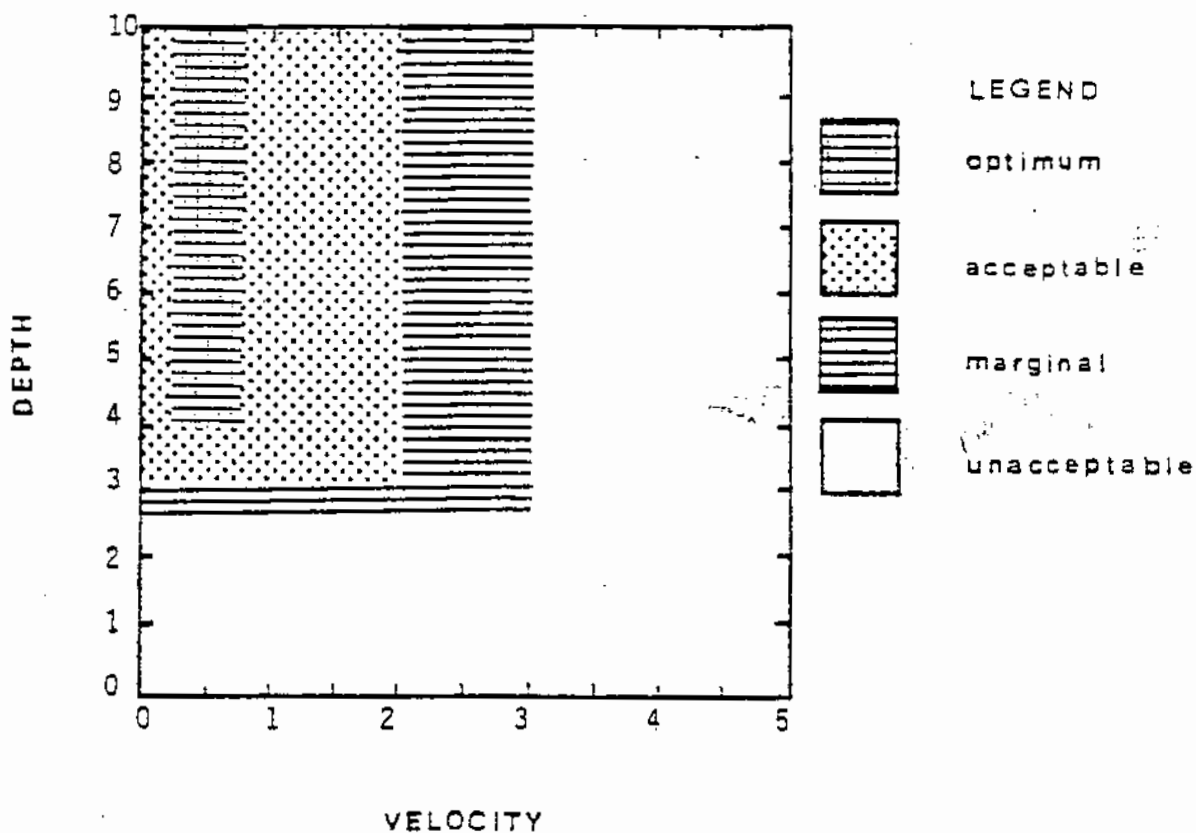
Lochler hose, John
Bp 17827

WATER CONTACT SWIMMING

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			4 ft +
minimum	2.5 ft	3.0 ft	
maximum	NA	NA	
VELOCITY			0.25-0.75 fps
minimum	0 fps	0 fps	
maximum	3.0 fps	2.0 fps	

COMMENTS: Water quality, temperature, slope of beach, visibility and underwater slope important.
Design safety criteria does not permit diving.

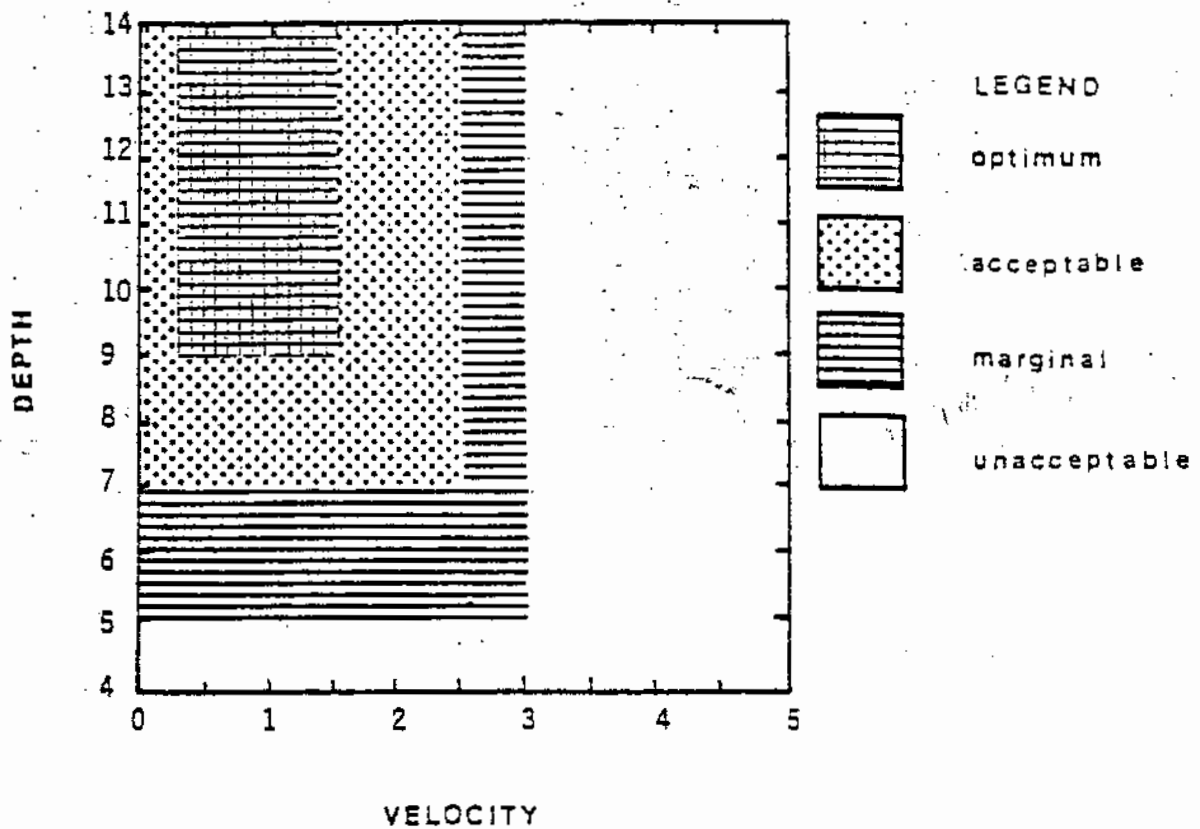


WATER CONTACT WATER SKIING

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			9 ft +
minimum	5 ft	7 ft	
maximum	NA	NA	
VELOCITY			0.25-1.5 fps
minimum	0 fps	0 fps	
maximum	3.0 fps	2.5 fps	

COMMENTS: Width is critical also.



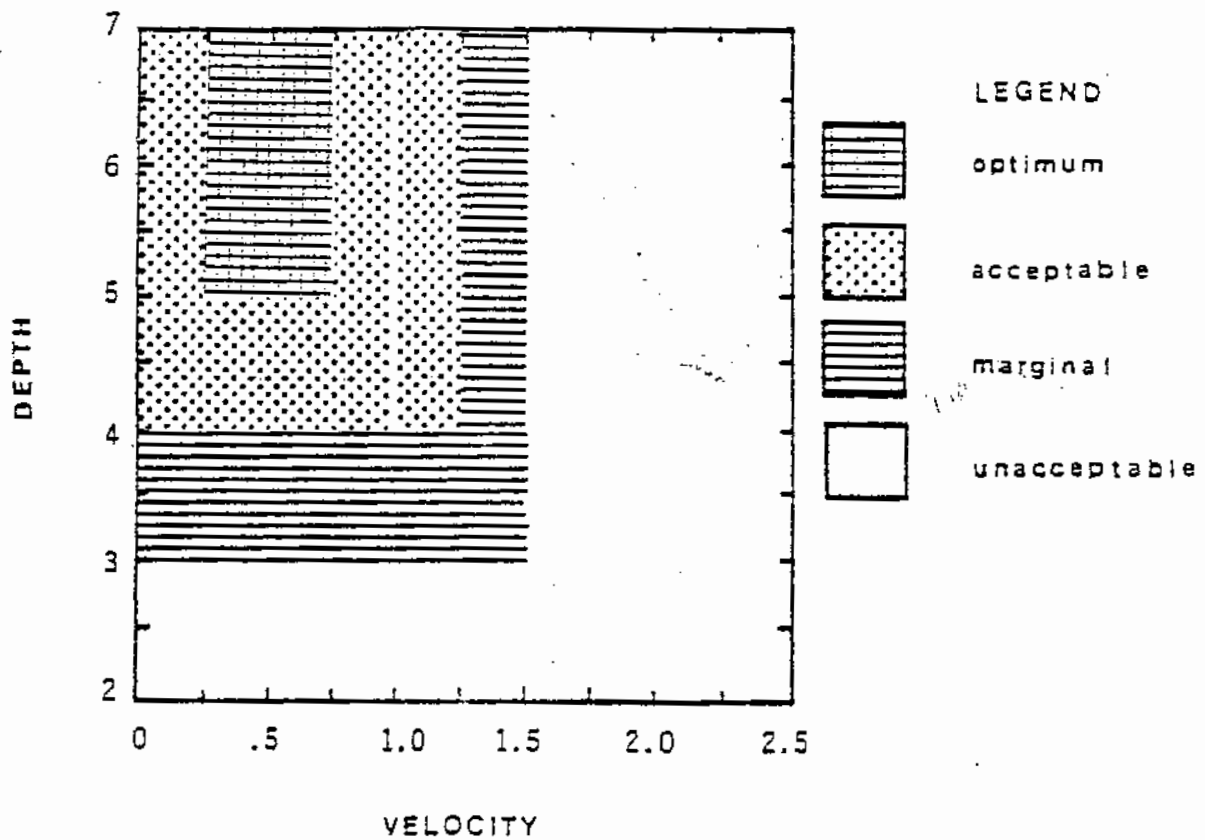
Lodderhose, John
Bp188727

BOATING SAILING

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			5 ft +
minimum	3 ft	4 ft	
maximum	NA	NA	
VELOCITY			0.25-0.75 fps
minimum	0 fps	0 fps	
maximum	1.5 fps	1.25 fps	

COMMENTS: Keel or centerboard depth is critical.

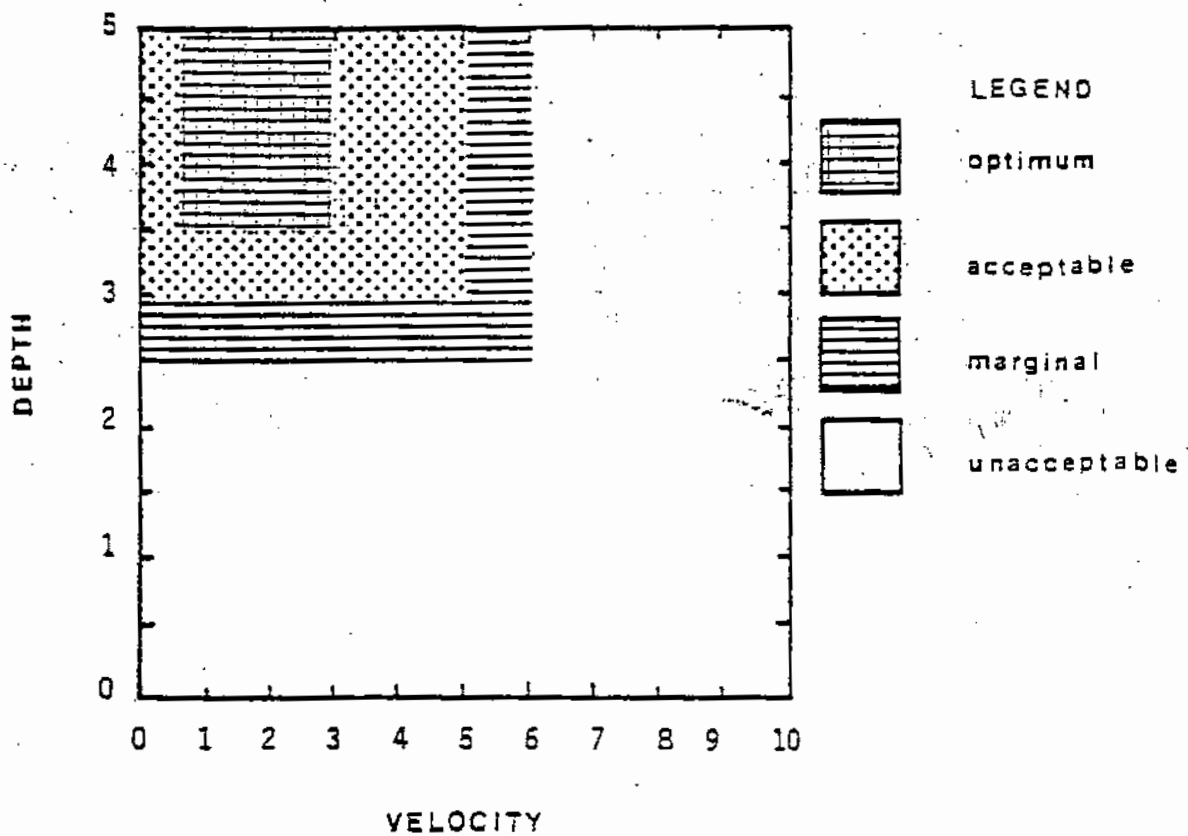


BOATING LOW POWER

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			3.5 ft +
minimum	2.5 ft	3.0 ft	
maximum			
VELOCITY			0.5-3.0 fps
minimum	0 fps	0 fps	
maximum	7 fps	6 fps	

COMMENTS: Low power boats are less than 50 hp.



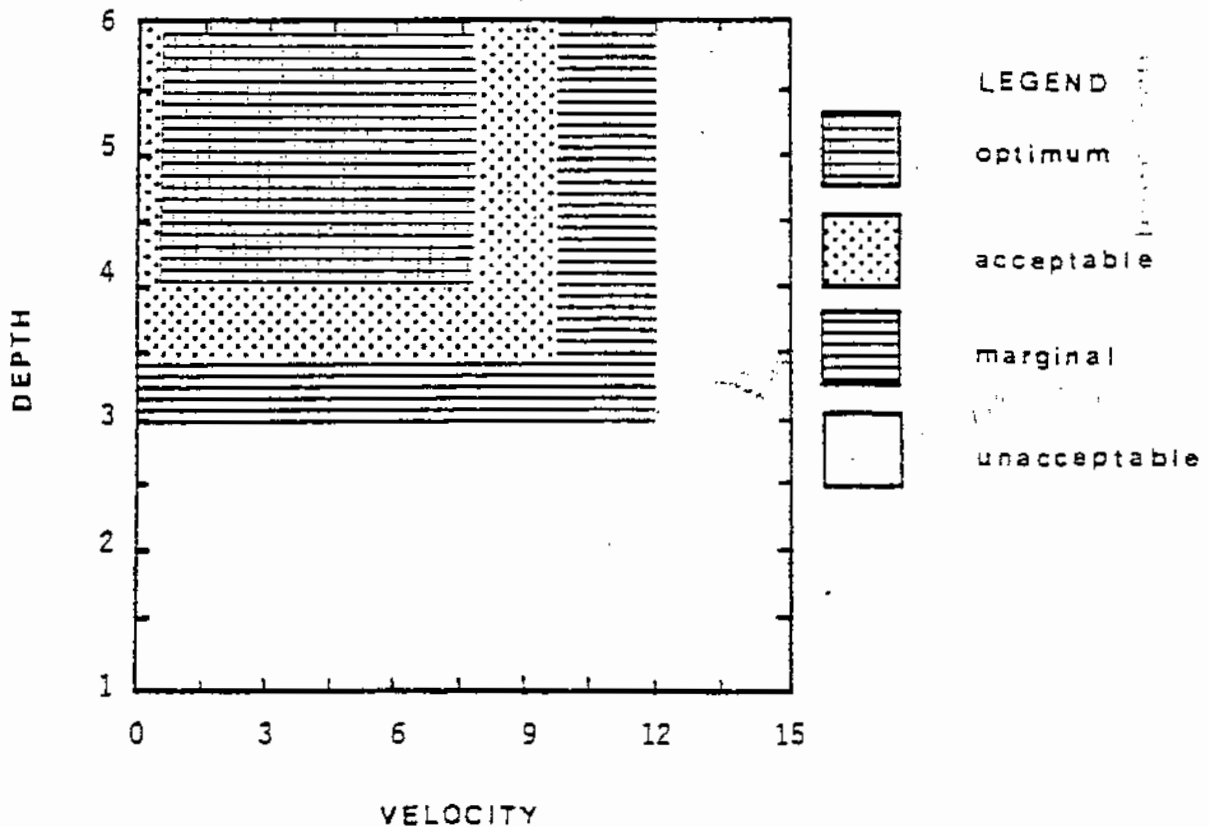
Wodderhose, John
Bp190727

BOATING HIGH POWER

CRITERIA

	PHYSICAL	SAFETY	OPTIMUM
DEPTH			4.0 ft +
minimum	3.0 ft	3.5 ft	
maximum	NA	NA	
VELOCITY			0.5-8.0 fps
minimum	0 fps	0 fps	
maximum	12.0 fps	10.0 fps	

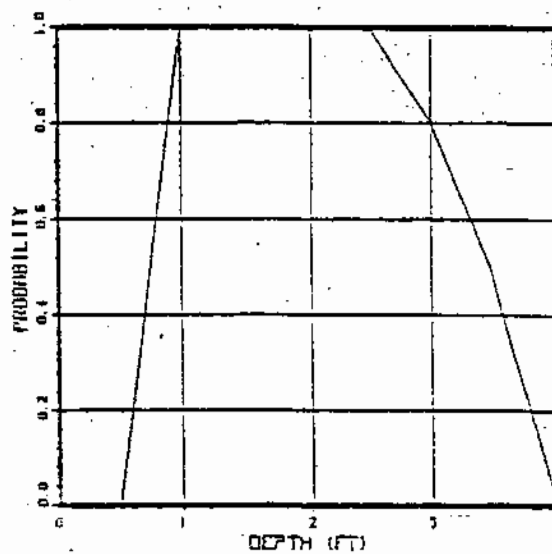
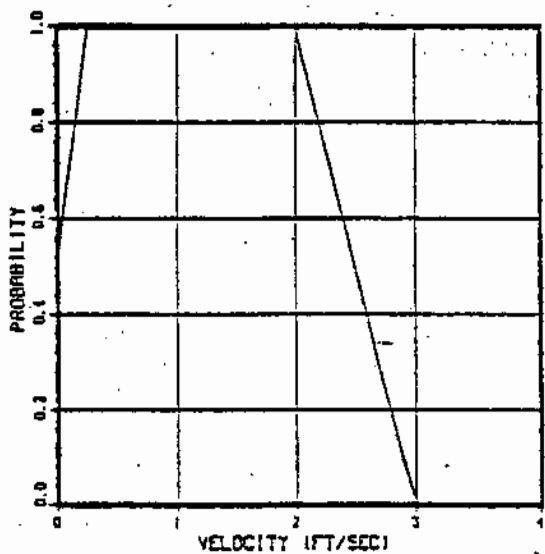
COMMENTS: High power is greater than 50 hp. Jet boats or sleds require only 1.0 ft + water depth. Higher velocities safe only under certain conditions.



FISHING WADING

700000

78/06/25.

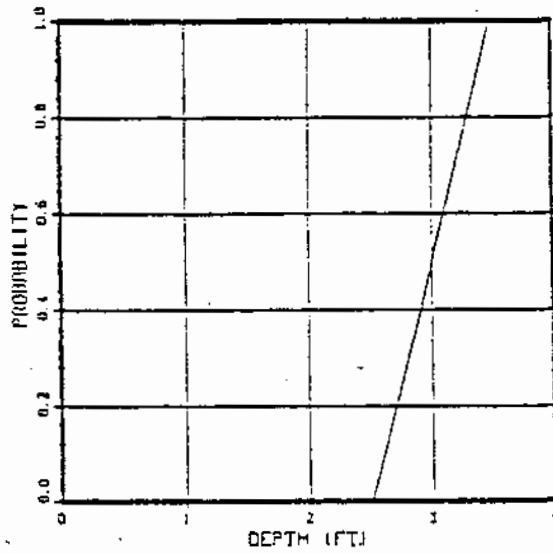
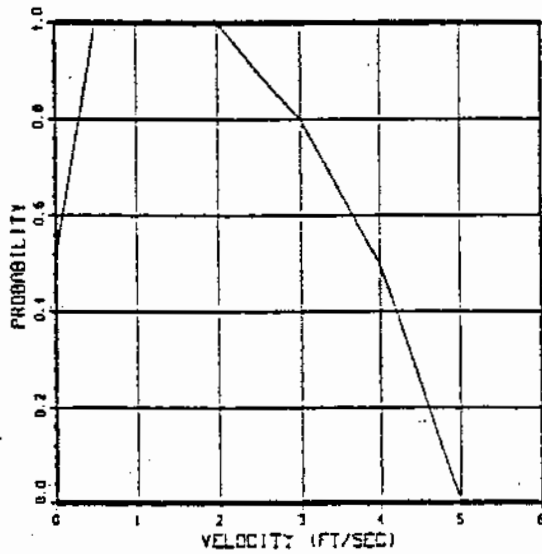


Lodderhose, John
Bp20827

FISHING BOAT POWER

700100

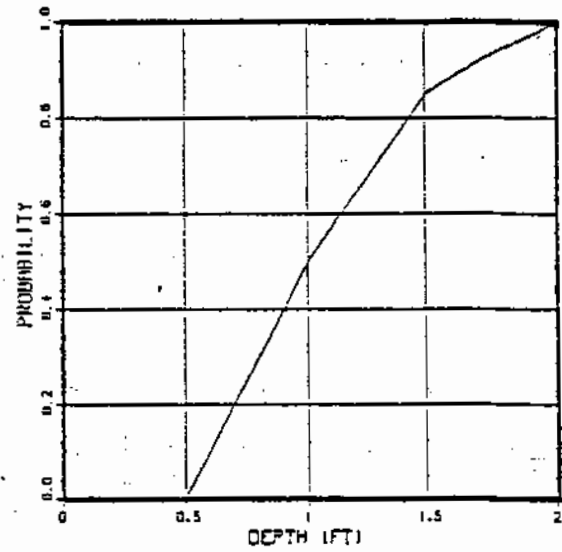
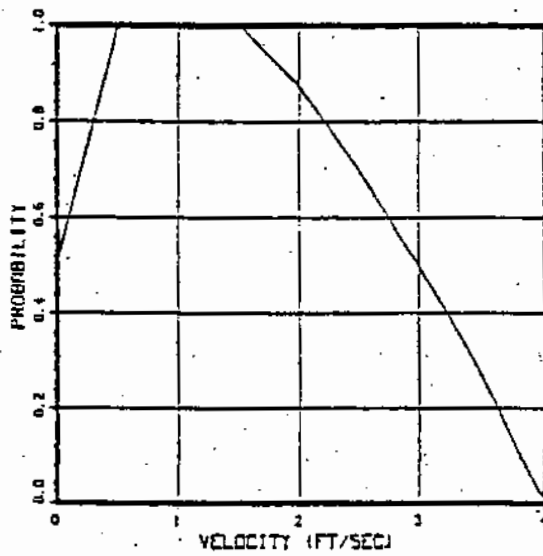
78/06/26.



FISHING BOAT NON POWER

700200

78/06/26.

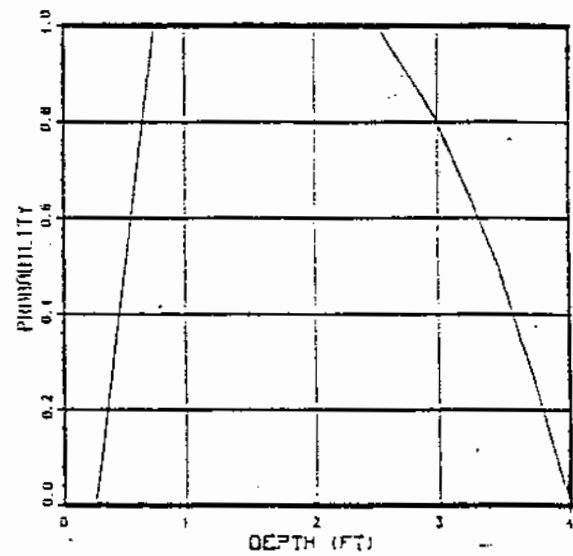
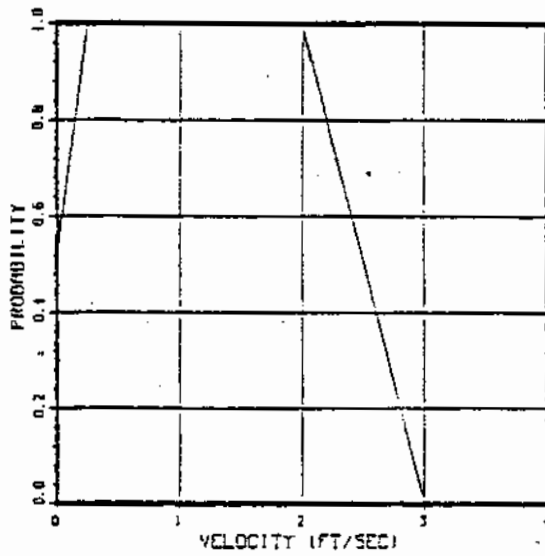


Lodderhose, John
Bp21 of 27

WATER CONTACT WADING

710100

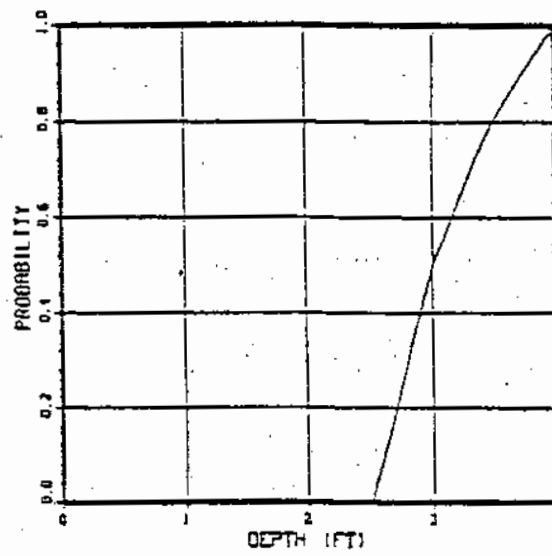
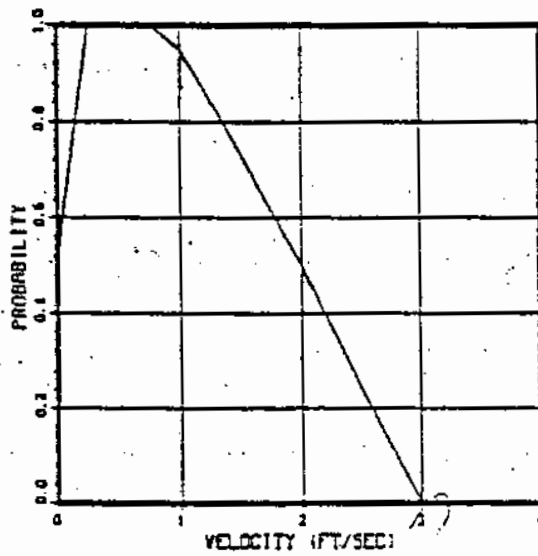
78/06/25.



WATER CONTACT SWIMMING

710000

78/06/26.

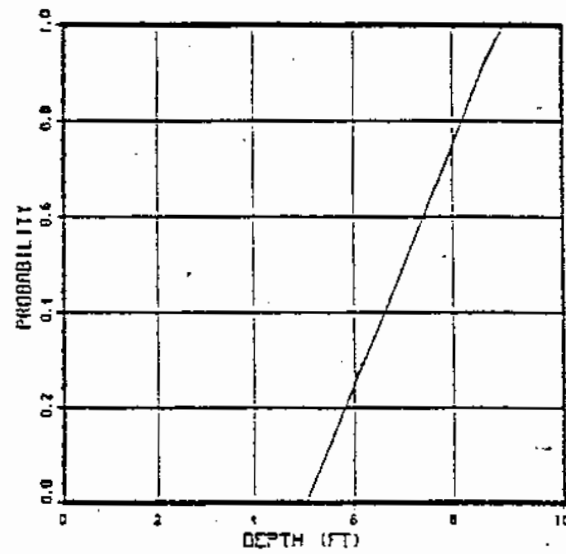
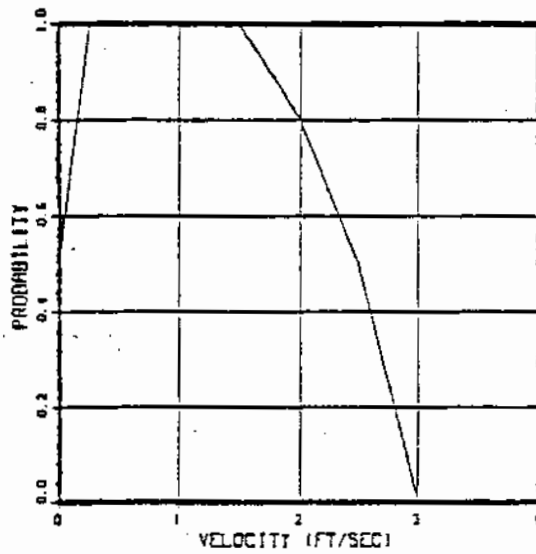


Locklerhose, John
B p 22 of 27

WATER CONTACT WATER SKIING

710200

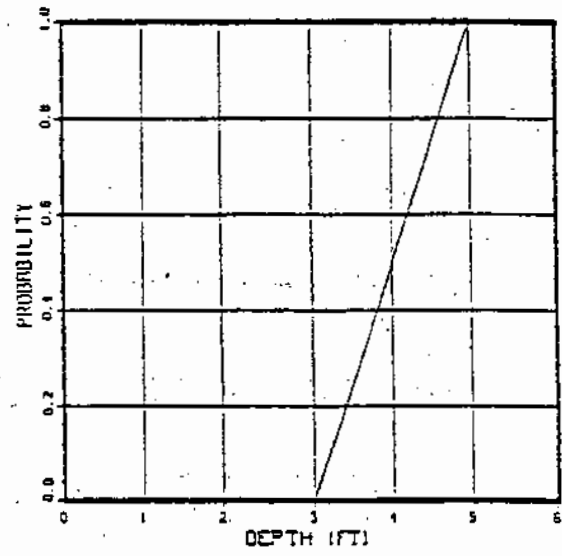
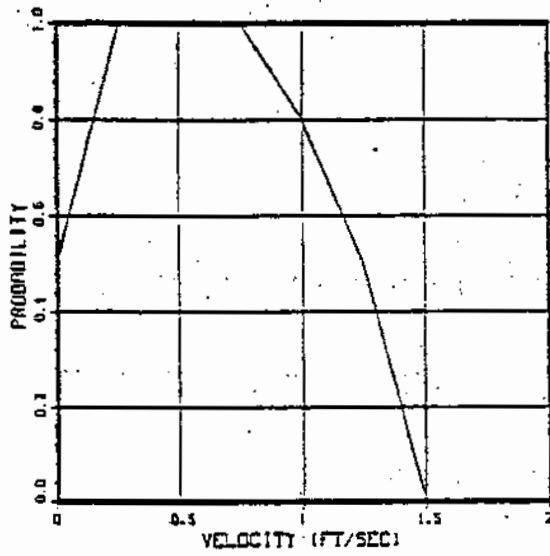
78/06/26.



BOATING SAILING

720000

78/06/26.

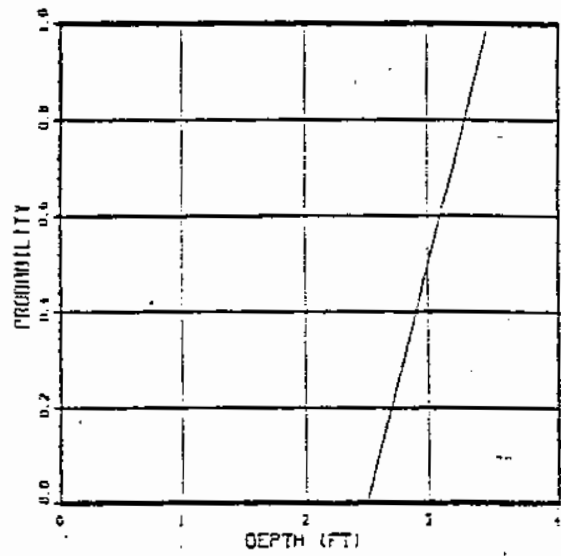
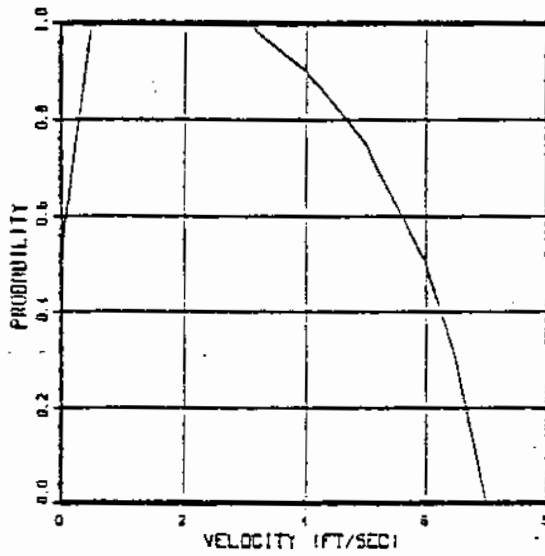


Lodderhose, John
Bp23827

BOATING LOW POWER

720100

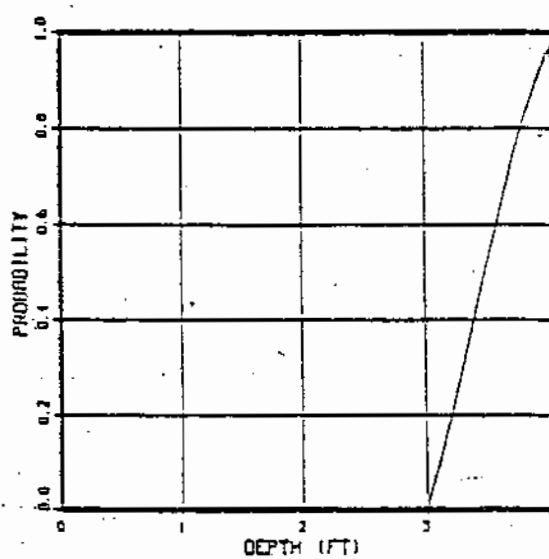
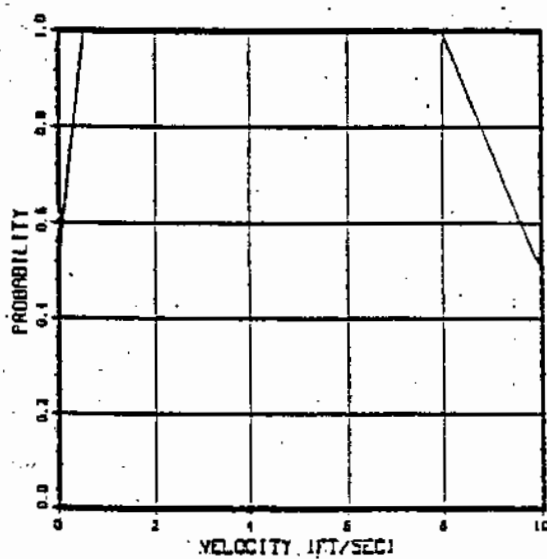
78/06/25.



BOATING HIGH POWER

720200

78/06/26.



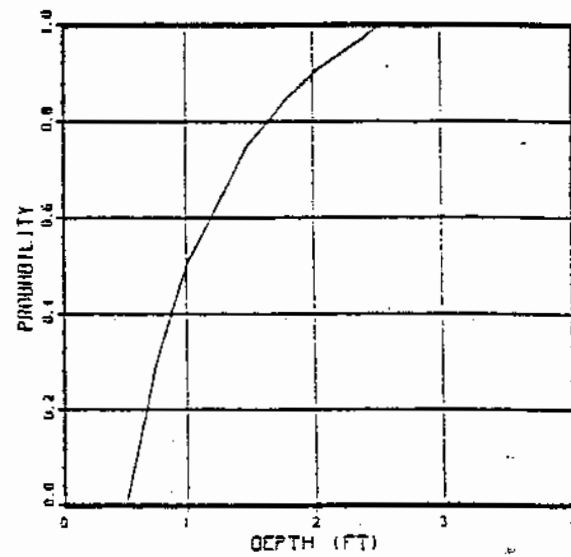
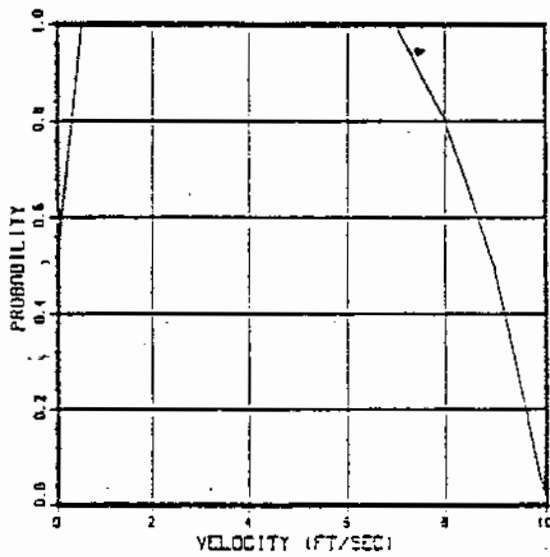
NOTE: Velocity plots have a maximum of 10 fps. The curves for the velocity for this activity reaches a probability of 0.0 at 12 fps.

Lodderhose, John
Bp 24827

BOATING CANOEING KAYAKING

720300

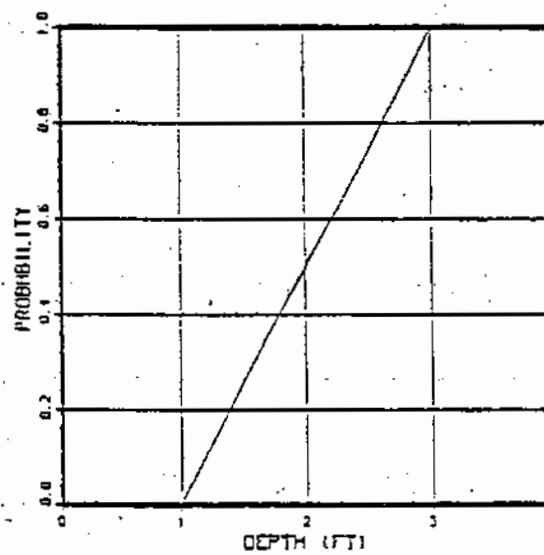
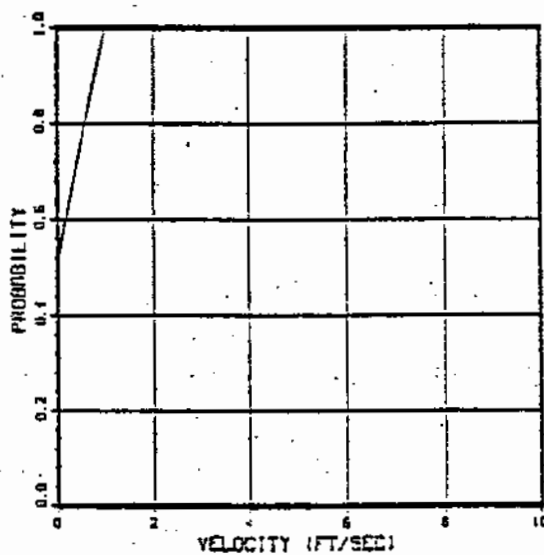
78/06/26.



BOATING ROWING RAFTING DRIFTING

720400

78/06/26.



NOTE: Velocity plots have a maximum of 10 fps. The curve for the velocity for this activity is at a probability of 1.0 at 10 fps, a 0.5 probability at 12 fps, and a 0.0 probability at 14 fps.

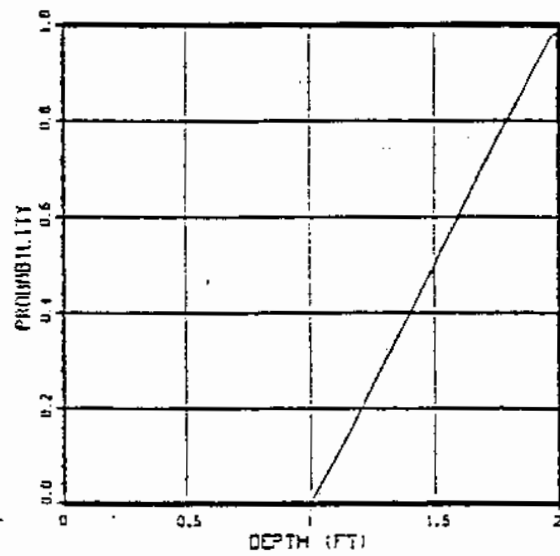
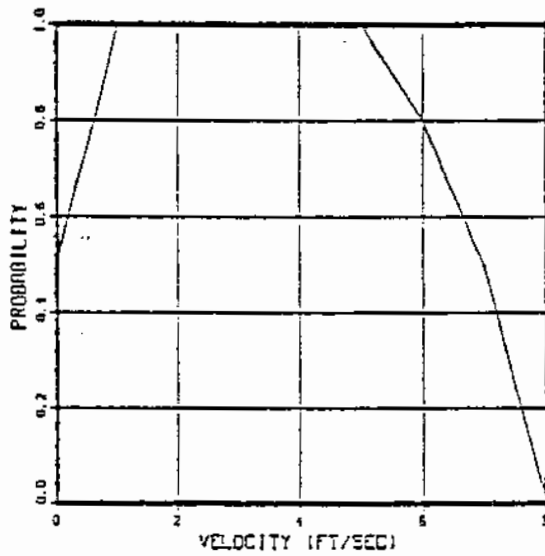
Lodderhose, John

Bp25 of 27

BOATING TUBING FLOATING

720500

78/06/26.



BIBLIOGRAPHIC DATA SHEET		1. Report No. FWS/OBS-78/34	2.	3. Recipient's Accession No.
4. Title and Subtitle Methods of Assessing Instream Flows for Recreation			5. Report Date June 1978	
7. Author(s) Ronald Hyra			8. Performing Organization Rept. No. IFIP-6	
9. Performing Organization Name and Address			10. Project/Task/Work Unit No.	
			11. Contract/Grant No.	
12. Sponsoring Organization Name and Address Cooperative Instream Flow Service Group, Western Energy and Land Use Team; Office of Biological Services; Creekside Building, 2625 Redwing Road, Fort Collins, Colorado 80526			13. Type of Report & Period Covered	
			14.	
15. Supplementary Notes				
16. Abstracts This information paper describes two techniques for performing recreational instream flow studies. The Single Cross Section Method is discussed briefly. The majority of the paper deals with the Incremental Method of assessing instream flows. Stream flow suitability criteria for recreation are presented for both methods.				
17. Key Words and Document Analysis. 17a. Descriptors Instream Recreation River Recreation Criteria River Recreation Potential Instream Recreation Methodology				
17b. Identifiers/Open-Ended Terms Cooperative Instream Flow Service Group				
17c. COSATI Field/Group				
18. Availability Statement Release unlimited			19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 52
			20. Security Class (This Page) UNCLASSIFIED	22. Price

Lodderhose, John
B p 26 of 27

The Biological Services Program was established within the U.S. Fish and Wildlife Service to supply scientific information and methodologies on key environmental issues which have an impact fish and wildlife resources and their supporting ecosystems. The mission of the Program is as follows:

1. To strengthen the Fish and Wildlife Service in its role as a primary source of information on natural fish and wildlife resources, particularly with respect to environmental impact assessment.
2. To gather, analyze, and present information that will aid decision-makers in the identification and resolution of problems associated with major land and water use changes.
3. To provide better ecological information and evaluation for Department of the Interior development programs, such as those relating to energy development.

Information developed by the Biological Services Program is intended for use in the planning and decisionmaking process, to prevent or minimize the impact of development on fish and wildlife. Biological Services research activities and technical assistance services are based on an analysis of the issues, the decisionmakers involved and their information needs, and an evaluation of the state-of-the-art to identify information gaps and determine priorities. This is a strategy to assure that the products produced and disseminated will be timely and useful.

Biological Services projects have been initiated in the following areas:

Coal extraction and conversion

Power plants

Geothermal, mineral, and oil shale development

Water resource analysis, including stream alterations and western water allocation

Coastal ecosystems and Outer Continental Shelf development

Systems and inventory, including National Wetlands Inventory, habitat classification and analysis, and information transfer

The Program consists of the Office of Biological Services in Washington, D.C., which is responsible for overall planning and management; National Teams which provide the Program's central, scientific and technical expertise, and which arrange for contracting of Biological Services studies with States, universities, consulting firms, and others; Regional staff who provide a link to problems at the operating level; and staff at certain Fish and Wildlife Service research facilities who conduct inhouse research studies.

U. S. Department of the Interior

Fish and Wildlife Service

As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.





2014 Williams Street
Jefferson City, MO 65109

Ms. Marlene Kirchner
Secretary, Missouri Clean Water Commission
PO Box 176
Jefferson City, MO 65102

Lodderhose, John
B. p27 of 27

Mississippi River

Maheer, Timothy

2005 NOV 17 AM 11:21
WATER PROTECTION PROGRAM

November 14, 2005

Ms. Stacia Bax
Use Attainability Analysis Coordinator
Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176

Dear Ms. Bax:

I am writing to urge the Clean Water Commission to not include any portion of the Mississippi River from the "whole body contact" exempt list. I use to live near the river and frequently fished (and ate the fish) in it. Although, I have not fished it for a number of years, I do know several people who do still fish (and eat the fish) from the Mississippi River. Many St. Louis City and County residents, as well as Illinois residents, use the river for recreation, including fishing, boating, and skiing, and it seems outrageous to me that it is even being considered to be included on the list.

Please do not include the "Mighty Mississippi" on the list. In a time when we should be doing everything possible to clean our waterways, it would be a real shame to take a significant step backwards.

Sincerely,



Timothy M. Maher

2005 NOV 17 AM 11:21
WATER PROTECTION PROGRAM



Missouri Department of Natural Resources
P.O. Box 176
Jefferson City, MO 65102-0176
ATTN: Ms. Stacia Bax

65102+0176-76 B002



Mississippi R.

Marino, Julie

CARE
Citizens Against River Exemption
11141 Glacier Drive
St. Louis, MO 63146

2005 NOV 21 AM 11:50
EPA/EPD/PROTECTION PROGRAM

2005 NOV 21 AM 11:50

November 18, 2005

The Honorable Stacia Bax
Use Attainability Analysis Coordinator
P. O. Box 176
Jefferson City, MO 65102

Dear Ms. Bax:

We are Citizens Against River Exemption (CARE), a group of Missourians that fights for the sanitation of our rivers. We are troubled by the decision of the Clean Water Commission (CWC) to exempt one hundred and forty two rivers from the new water quality rules. These rules, established by the Clean Water Act, involve disinfecting sewage before it comes in contact with these bodies of water. This preventative measure helps keep rivers pathogen-free for the safety of the public. However, rivers such as the Mississippi River, River des Peres, Maline Creek, and Coon Creek will be officially excluded from this safety precaution if the Environmental Protection Agency confirms the CWC's decision. Our purpose as an organization is to persuade elected officials to have these exceptions removed from the Clean Water Act.

We are writing you to ask for your support in CARE's fight for sanitary rivers. The people involved in this organization care about the citizens who will be affected by this legislation. As members, we believe that if the Environmental Protection Agency passes this exemption request, it will be due to poor judgement. Allowing waste to run into our rivers could have detrimental effects. Sewage can carry the bacteria known as Escherichia coli, or E. Coli, which has the potential to infect anyone who comes in contact with the contaminated water. Besmirched water may also carry other harmful bacteria, as well as parasites. Incorporating all rivers under the Clean Water Act's updated water quality rules will prevent civilians from experiencing preventable illnesses.

We hope you understand our concerns. We urge you to use your influence to persuade the EPA to avoid exemptions of these rivers. Your support would be greatly appreciated. Please contact us with your opinions on the matter.

Sincerely,



Julie Marino
President of CARE

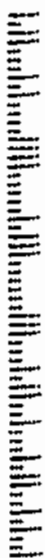
LAKE
11141 Glacier Dr.
St. Louis, MO 63146

SAINT LOUIS MO 631
19 NOV 05 PM 07 L



The Honorable Statue Box
USE Attainability Annals Coordinator
P.O. Box 171
Jefferson City, MO 65102

65102-0176



Mississippi River

Protection for Mississippi, River des Peres, Maline Creek, Coon Creek - Stacia Bax/WPCP/DEQ/MODNR

Meyer, John



Jjsmlem@aol.com
11/27/2005 06:49 PM

To: stacia.bax@dnr.mo.gov
cc:
bcc:
Subject: Protection for Mississippi, River des Peres, Maline Creek, Coon Creek

Dear Ms. Bax:

I am a voting citizen of Missouri who favors maintaining the highest water standards for all of our rivers, creeks and watersheds.

Today's waste disposal technology permits the highest standards of pollution control. We should uphold high standards for all sites.

The Mississippi, River des Peres, Maline and Coon Creeks are most important to maintain for recreation because they are close to major population centers. Time and travel cost constraints make them highly desirable for recreational use. They will be used if they are kept clean.

Sincerely yours,

John S. Meyer, MD

Mississippi River

Mississippi River - Stacia Bax/WPCP/DEQ/MODNR

Neidhardt, Jane



Jane_Neidhardt@aismail.wus
tl.edu

10/31/2005 08:40 AM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Mississippi River

Please do all that you can to enforce the Clean Water Act standards and to protect ALL waters in Missouri

Thank you for your efforts.

Jane Neidhardt
Citizen
St. Louis, Missouri

Mississippi River

Clean Water Act exemptions - Stacia Bax/WPCP/DEQ/MODNR

Norton, Dennis



"Dennis Norton"
<dnorton3@charter.net>

10/29/2005 04:21 PM

To "Stacia Bax" <stacia.bax@dnr.mo.gov>

cc

bcc

Subject Clean Water Act exemptions

Good Afternoon,

As an avid outdoorsman, fisherman, canoeist and boater, I am absolutely opposed to exempting any portion the Mississippi River from the provisions of the Clean Water Act that require wastewater treatment plant discharge to be disinfected before release into the river.

Do not allow this to happen. It is wrong and dangerous to the health of us who use the river. Although not a beautiful backwoods stream, the river is an inviting and exciting body of water that flows through populated areas. Do not allow it to be a conduit for disease.

Dennis Norton

Mississippi River

Oberndorfer, Angie

Swimming in Mississippi River - Stacia Bax/WPCP/DEQ/MODNR



"Angie Oberndorfer"
<Angie.Oberndorfer@peoples
oa.com>

10/27/2005 03:39 PM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Swimming in Mississippi River

This letter is in response to the article I read in the paper regarding your requests for information about swimming in this particular body of water. My husband & I are members of the Wittenberg Boat Club in Wittenberg MO. We along with numerous other members utilize the Mississippi River throughout the Spring, Summer & Fall for River boating. There are also numerous members who own jet skies that are on the water during this time. During the hotter summer months, we spend quite a bit of time sitting in the water on the sand banks of the river cooling off. Many of us have our kids out there with us & they actually do swim in the more shallow areas of the river near the bank or behind the dikes in the river. I know of numerous other boat clubs...Chester Boat Club & Perry Dice Boat Club that have avid boaters that utilize this River from the Chester, IL, bridge down to Cape Girardeau, MO. Personally, I would appreciate additional clean water requirements as outlined by your article in the area that we enjoy. I'm not exactly sure where Dam #27 is located so am unsure as to whether the area I am referring to is included in the particular area you are requesting comment.

Should you need additional information, feel free to contact me at the number below or reply directly to this e-mail.

Mississippi River

» Frequent use of Mississippi river for boating and swimming. - Stacia Bax/WPCP/DEQ/MODNR

Orr, Rich

p187



"Rich Orr"
<richo@alpineshop.com>
11/21/2005 05:22 PM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Frequent use of Mississippi river for boating and swimming.

For Clean Water documentation purposes:

Here is an assortment of pictures taken during our St. Louis County Park Classes over the last 5 years on the Mississippi and Missouri Rivers here in the metro area. We take a minimum of 3 trips per season from the Confluence of the Missouri/Mississippi each year for the last five years and those are just the official classes.

I and 20 or so of my friends also spend many week-ends each summer at the Chain of Rocks paddling and getting wet as it is the best whitewater to be found within 500 miles of St. Louis on most week-ends in the summer.

As you can see from these pictures on the Mississippi below the mouth of the Missouri, there is a lot of body contact with the river whether it is from water dripping off the paddle to wading into the water to enter/exit the boat or simply flipping over by accident to cool off.

Below is a sample trip report from a typical outing on the Mississippi.

--

Rich Orr

Alpine Shop Paddlesports
& Camping Buyer
314/962-7715, 314/775-2144, Fax 962-7718
St. Louis, Chesterfield,
and Columbia, Missouri
richo@alpineshop.com
www.alpineshop.com

Sea Kayaking the Mississippi-Saturday 9/14/02

September 14 dawned clear and cool on the morning of the last of our 3 advanced sea kayak classes on the Mississippi. By the time our group of 12 got the boats into the water and headed upstream past the fleet of rusting barges moored along the river, the weather had warmed up some with a slight upstream breeze but and it was still a picture perfect day.

As usual, everyone was amazed how easy it was to paddle upstream against the current to reach a good point from which to cross the Mississippi over to the mouth of the Missouri. We had to wait a few minutes for a barge headed upstream to pass (we have to be sure we don't cross too closely in front of one of those guys!) and a large yacht-type cruiser going the other way. Everyone made the ferry across without difficulty and we were soon rounding the point between the two great rivers at the new Confluence State Park and heading in the footsteps of Lewis and Clark up the Missouri River!

As my students quickly found out, the Missouri River can be much swifter than the Mississippi, especially when a string of four moored barges forced us out into the main rush of the current as we clawed our way upstream for

about 1/2 mile to the point where we cross the Missouri to arrive at the 1000 acre Columbia Bottoms Conservation Area. At our beautiful sandy island lunch spot at the mouth of the Missouri, which we shared with dozens of seagulls and cormorants, everyone marveled at how they we had been able to paddle upstream on and paddle across, two of the world's largest and most famous rivers! The Mississippi and Missouri Rivers, which merge a few miles north of downtown St. Louis, are a fabulous but tremendously underused recreational resource! Most of the paddlers who ventured to this beautiful area with us agreed that it's a tremendous thrill to experience this wonderful area!

After lunch, we began the arduous trek down the 4 miles of broad flatwater and past the entrance to the canal where all motorized river traffic must turn in order to bypass the falls that we purposefully headed towards. Mercifully there was almost no headwind, which is an aberration we have enjoyed on all of our advanced trips to the Mississippi this year. Quite often the upstream headwinds are so strong that downstream progress is all but impossible! Not this day though!













Unlike the previous two trips earlier in the month the river was even lower and impossible to run near the Illinois shore due to the exposed rocks, so we needed to run the steep but smooth drop closer to the middle of the river! As usual the group split up into those who wished to run the falls (under careful guidance) and those who preferred to take the far less intimidating route of walking around the rapids on the Illinois side. After splitting up 9 of us began to paddle towards the center of the river to line ourselves up for the run down the big slot in the dam that is the only clean route without rocks in low water.

This very nervous group of 6 students, 2 instructors, and one post-grad, all veterans of our earlier beginner and intermediate classes, regrouped briefly behind the castle-like water intake tower and then headed single file towards the roaring cauldron that is known to (though only slightly to most) St. Louisans as the Chain of Rocks!

I had repeatedly tried to prepare the novices for what it would be like to go over the 12 ft. drop head on into several 8 ft standing waves (I only succeeded in scaring the heck out of them) but naturally there was no way I could really prepare anyone fully for such an experience. I went first and happily bounced my way though but, as I expected when I looked behind me, boaters, paddles, and kayaks were quickly separated from each other and those of us still upright quickly began gathering up everyone who had flipped and all their gear. Since we had about an equal number pass through upright to those that swam we were able to recover everyone quickly and were on our way with a lot of exhilarated paddlers who had only lost one shoe and a little dignity during the run.

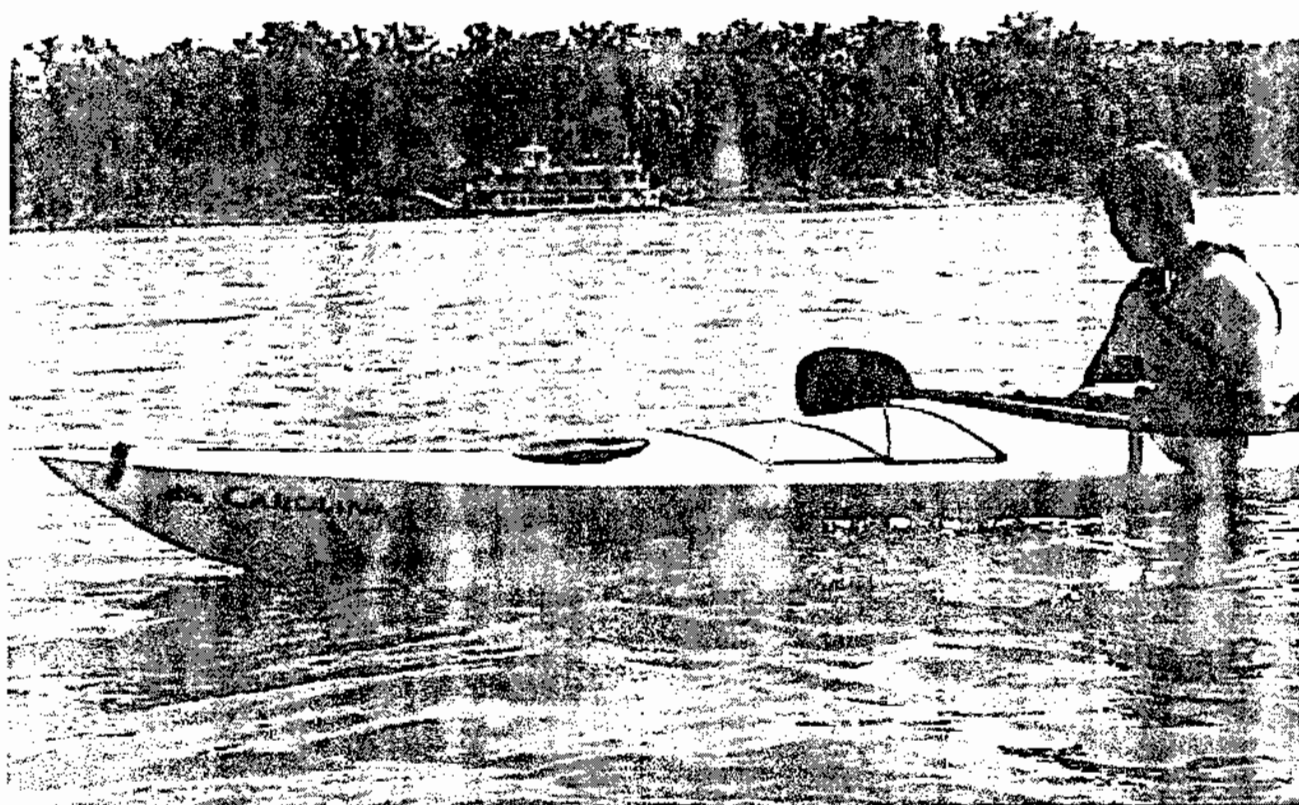
Most everyone agreed that running the chain was the one of the most fun things they had ever done outside of an amusement park! Which of course is one of the many reasons we kayak!

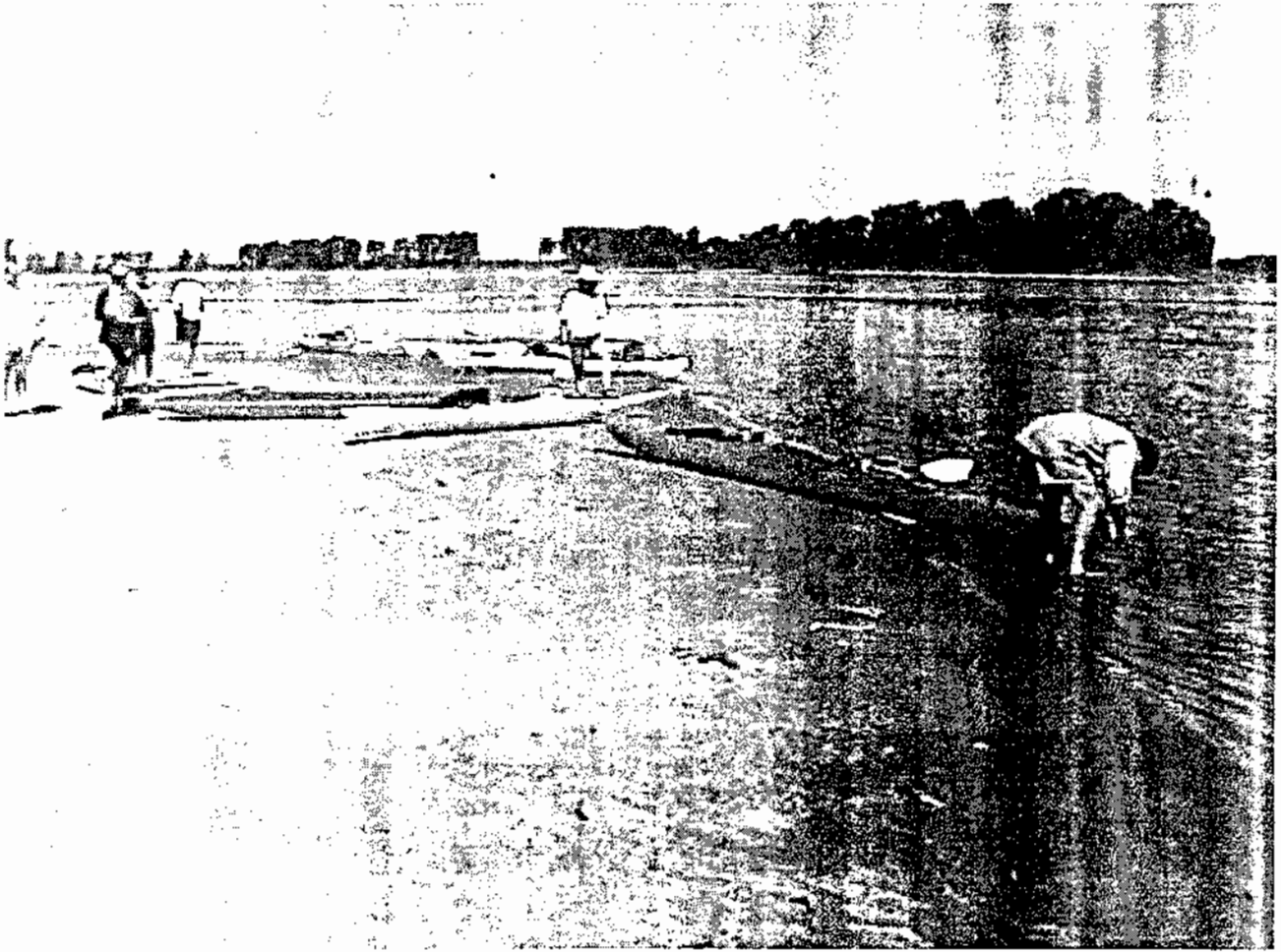
Rich Orr

        
Paul & Tom Sawyer* beach* MVC-004F.JPG Rich in rapid Rich in surf industrial kayaking* on the beach over the top Put in
  
Put in 2 Rich @ chain2.jpg unsuccessful run

Orr, Rich

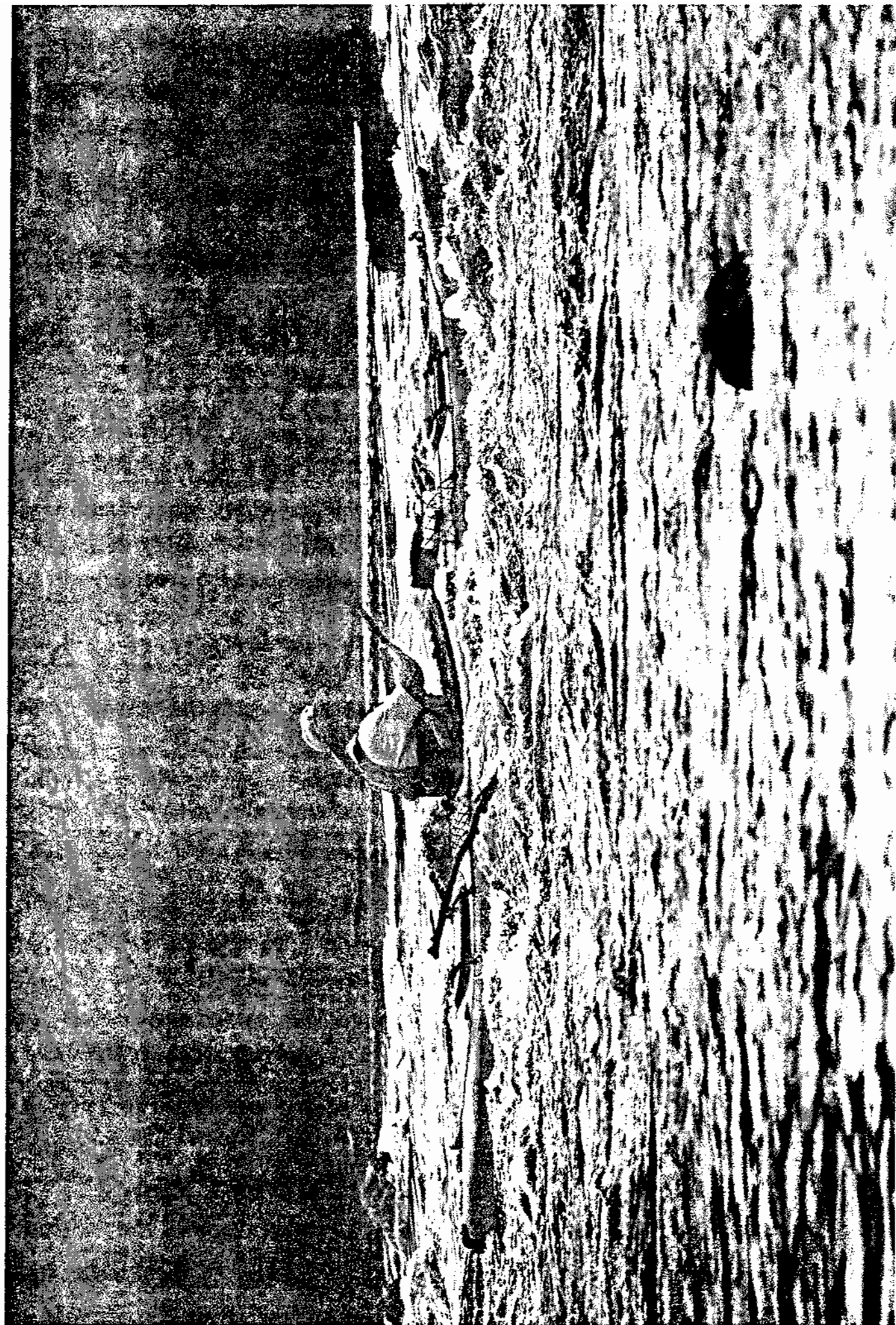
p2067



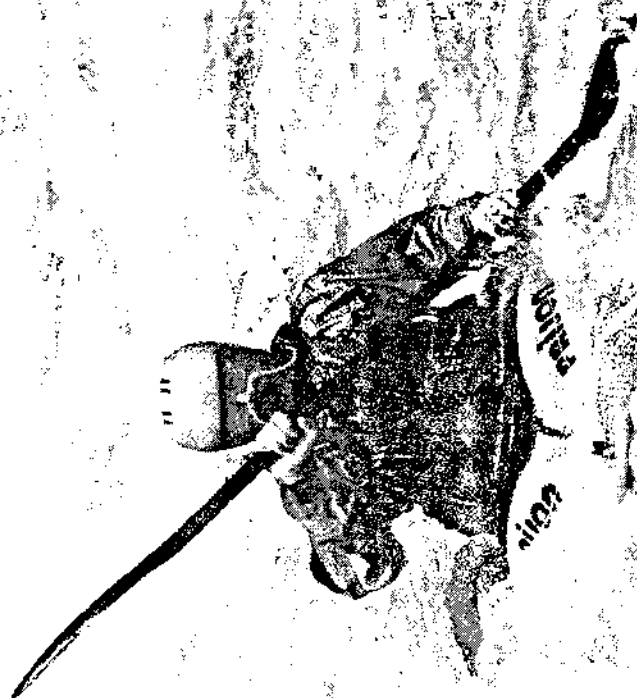


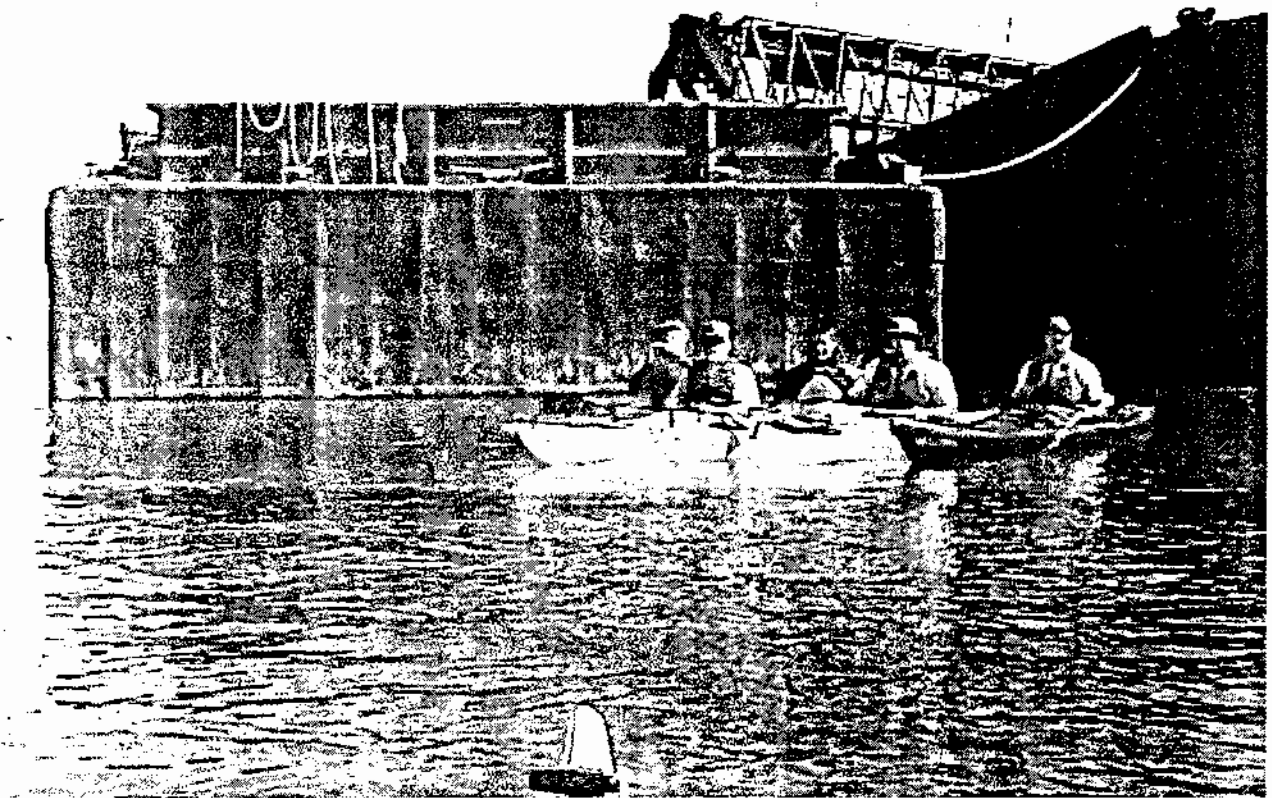
Orr, Rich
p 347



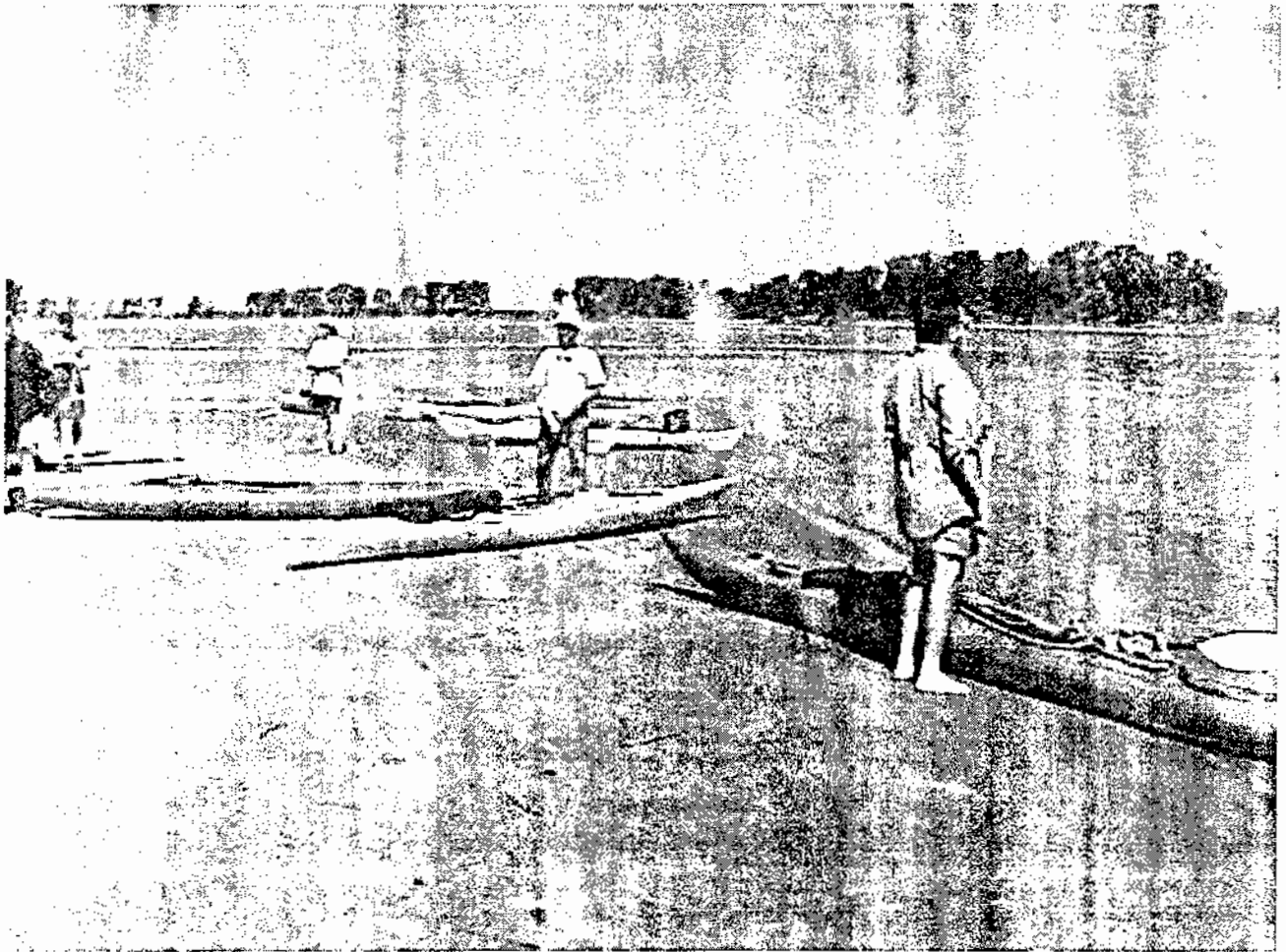


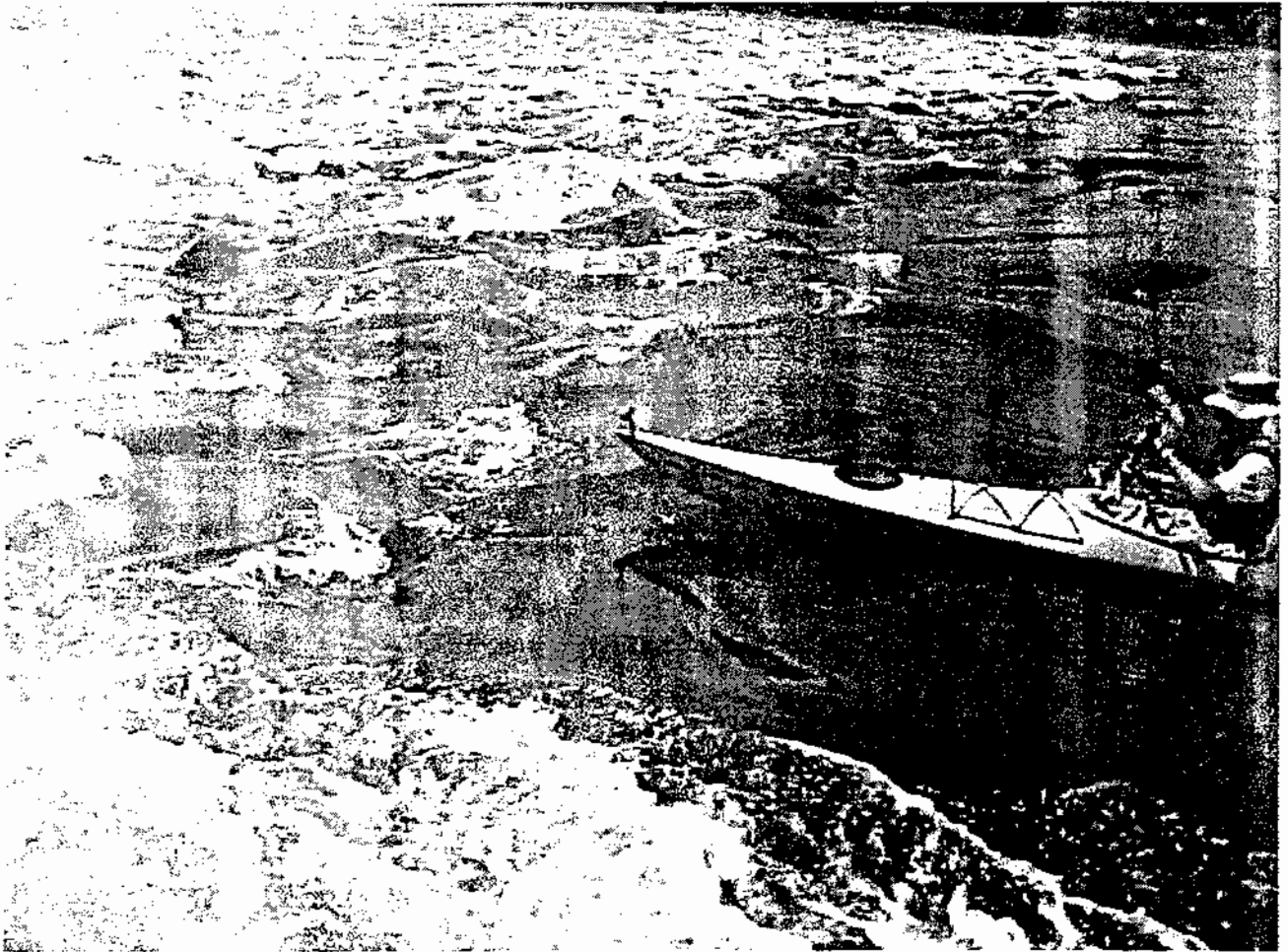
Orin Rich
p4/87





Orr, Rich
p 5 of 7



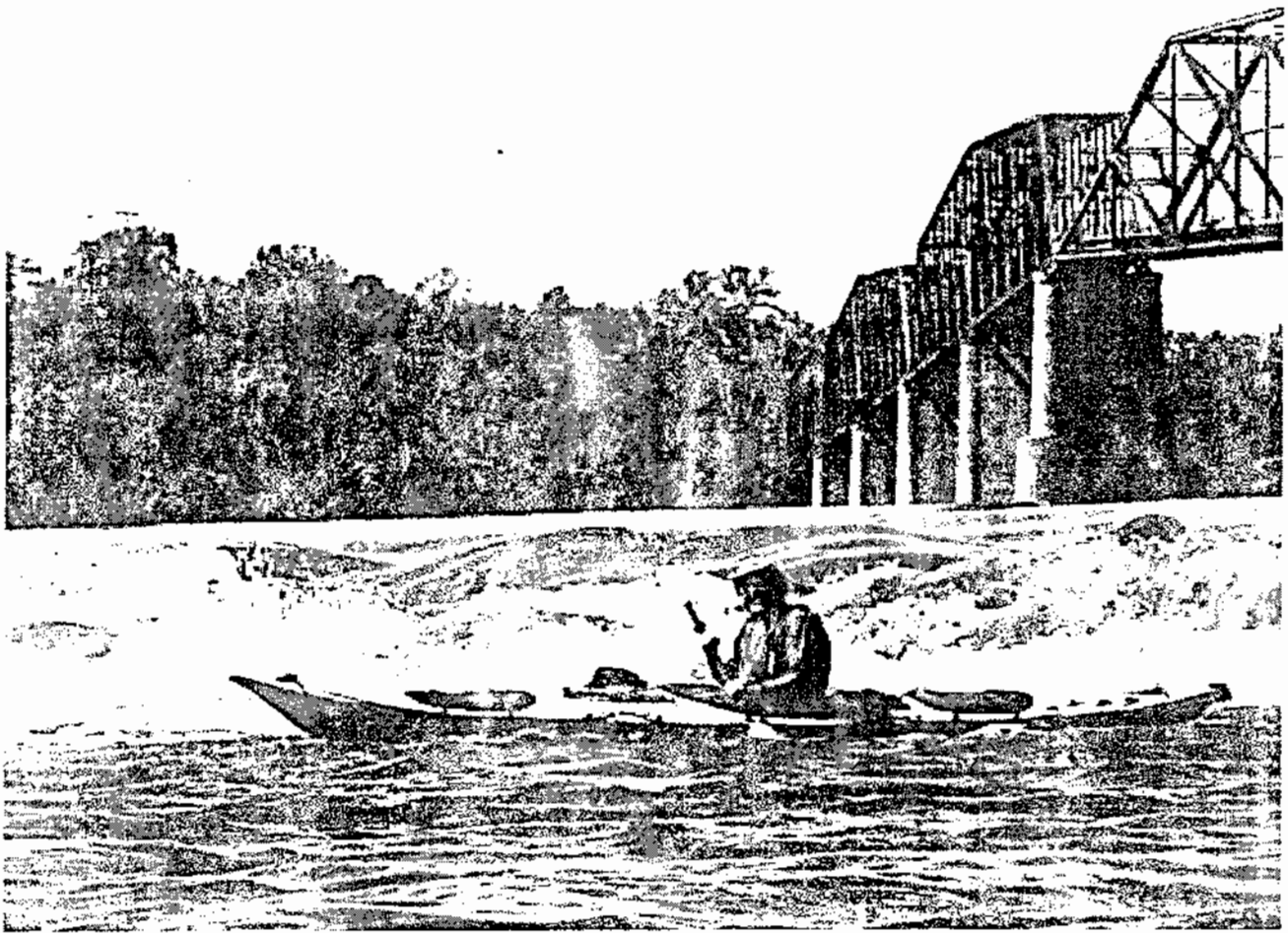


Orr, Rich
p687





Urr, Rich
p787





Mississippi River

Reeves, Lum
p1082

William Reeves, Ph.D.
238 West Glendale Road
Webster Groves, MO 63119

November 15, 2005

Stacia Bax
Use Attainability Analysis Coordinator
P.O. Box 176
Jefferson City, MO 65102-0176

RE: Comments on Clean Water Commission Actions for Four Missouri Waters

Dear Ms. Bax:

I am writing the Missouri Department of Natural Resources' Water Protection Program and Missouri Clean Water Commission as a native Missourian who is concerned with preserving this State's natural resources. I hereby submit my comments on the Clean Water Commission's action to exempt the Mississippi River, the River Des Peres, Maline Creek and Coon Creek from Whole Body Contact Recreation (WBCR) designations.

I have over a decade's experience in water quality and environmental science. After earning my Ph.D. in toxicology I was employed by the California State Water Resources Control Board. While with the Board I was responsible for overseeing UAA development and approval, developing water quality standards, reviewing National Pollutant Discharge Elimination System permits, and chairing the Board's Effluent Dominated Waterways work group. Since 2004 I have worked for a local consulting firm conducting risk assessments and evaluating the human health impacts of contaminated water supplies.

WBID 1707, Mississippi River, St. Louis City and County, UAA 0301: The Internal Review Committee (IRC) correctly concluded that the UAA for the Mississippi River failed to demonstrate a lack of WBCR under any of the three factors considered. Nevertheless, the Clean Water Commission chose to ignore its own staff and find the opposite was true. One piece of evidence the Commission seems to have relied on was an assertion by the Metropolitan St. Louis Sewer District claiming that channel velocities in the St. Louis area do not permit WBCR. In fact, Martin Strel, a marathon swimmer, completed a journey from the headwaters to New Orleans in 2002. (http://www.siol.net/dogodki/martinstrel/lang_context.asp?page_id=1320) Mr. Strel is not alone. Other marathon swimmers have made similar journeys in various forms over the years. The US Army Corps of Engineers actually includes the topic of swimming the length of the Mississippi River in the Frequently Asked Questions section of its web site. Water skiing is also common in the Mississippi near St. Louis. The Commission also received

information that since Sauget, Illinois has obtained a disinfection waiver from Illinois EPA there is no reason to protect WBCR on the Missouri side of the river. Nothing could be farther from the truth or lacking in sound reasoning. MSD has never had to disinfect its discharge into the river, so could it be possible that Illinois considered MSD's discharge the reason Sauget should not have to disinfect? The correct answer is to disinfect both discharges. These facts aside, nothing in the UAA demonstrates that the factors purported to prevent WBCR from being attained cannot be remedied. This is an essential component of any UAA and without it, the burden of proof outlined in 40 CFR 131.10(g) is not met. The Commission must reverse its decision and retain WBCR for the Mississippi River.

WBID 1710 and 1711, River Des Peres, St. Louis City, UAA 0494: The IRC correctly concluded that the UAA for the River Des Peres failed to demonstrate a lack of WBCR under any of the five factors considered. Nevertheless, the Clean Water Commission chose to ignore its own staff and find the opposite was true, presumably on the basis of hydrologic modifications. Nothing in the UAA or the report on the Commission's findings demonstrates that the hydrologic modifications cannot be operated in such a way as to make the use attainable. This is a key consideration of 40 CFR 131.10(g)(4). Until this demonstration is made, the Commission must reverse its conclusions and retain WBCR for all of the River Des Peres. The Commission should also explain why it chose to ignore comments stating that children wade and play in the river. I agree with the commenter who described the importance of eliminating combined sewer overflows, promoting separate sewers and better managing the river. Perhaps requiring disinfection would provide additional motivation for achieving these goals.

WBID 1709, Maline Creek, St. Louis County and City, UAA 0493: The IRC correctly concluded that the UAA for Maline Creek failed to demonstrate a lack of WBCR under any of the five factors considered. Nevertheless, the Clean Water Commission chose to ignore its own staff and find the opposite was true, presumably on the basis of hydrologic modifications. The letter the Commission relied on to reach this unsupported conclusion is not available on DNR's web site at the address indicated. The record is therefore incomplete and the public is prevented from making comments based on the information before the Commission. This action must be suspended until the public has the opportunity to review the full record. Nevertheless, nothing in the UAA or the report on the Commission's findings demonstrates that the hydrologic modifications cannot be operated or modified in such a way as to make the use attainable. This is a key consideration of 40 CFR 131.10(g)(4). Until this demonstration is made, the Commission must reverse its conclusions and retain WBCR for all of Maline Creek.

WBID 0132, Coon Creek, Randolph County, UAA 0489: The IRC correctly concluded that the UAA for Coon Creek failed to demonstrate that WBCR is unattainable. The creek met the

Reeves, Wm
p 2 of 2

average depth requirement at one site and an interview provided evidence that the creek contains at least one pool that is three feet deep during base flow conditions. Nevertheless, the Commission chose to ignore the IRC and find that WBCR is not attainable based on a supplemental UAA. This UAA is not available on DNR's web site at the address indicated. The record is therefore incomplete and the public is prevented from making comments based on the information before the commission. This action must be suspended until the public has the opportunity to review the full record before the Commission. Based on the limited information DNR does provide, it appears the Commission chose to base its decision in part on inaccessibility. Nowhere in EPA's water quality standards regulations is there a mention of inaccessibility as a factor to consider when assessing attainability. The Commission is then left only with low flows, a line of evidence refuted by the original UAA and subsequent IRC findings. The Commission must reverse its decision and retain WBCR for all of Coon Creek.

EPA's September 8, 2000 letter to DNR laid out Missouri's failings with respect to complying with the Clean Water Act and explained in no uncertain terms the State's duty in designating uses. "The 'use' of a water body is the most fundamental articulation of its role in the aquatic and human environments, and all of the water quality protections established by the CWA follow from the water's designated use. If a use lower than 'fishable/swimmable' is designated based on inadequate information or superficial analysis, water quality based protections that might have enabled the water to achieve the goals articulated by Congress in section 101(a) may not be put in place. As a result, the true potential of the water body may never be realized, and a resource highly valued by Congress may be forever lost."

The logic and evidence used to justify removing WBCR are inadequate and superficial. The Commission does not have anything in the record upon which to base a decision to remove WBCR for any of the waters discussed in this letter. Furthermore, to remove any use, DNR must conduct an antidegradation analysis and submit it for public review and comment. None is presented so this process cannot move forward. It is unfortunate that the people of Missouri will have to pay the bill for this meaningless exercise in paper shuffling. We deserve better than this.

Sincerely,

s/William Reeves

William Reeves, Ph.D.



"Bill Reeves"
<wr_reeves@yahoo.com>
11/14/2005 08:28 PM

To stacia.bax@dnr.mo.gov
cc
bcc
Subject Comments on Mississippi River, River Des Peres, Maline
Creek and Coon Creek

Yahoo! FareChase: Search multiple travel sites in one click.



<http://farechase.yahoo.com> Reeves_November 2005 MoDNR UAA Comment Letter.doc

Mississippi River

Re: Mississippi River - Stacia Bax/WPCP/DEQ/MODNR

Rhodes, James



"James Rhodes"
<jarhodes@sbcglobal.net>
11/01/2005 05:27 PM

To "Stacia Bax" <stacia.bax@dnr.mo.gov>
cc
bcc
Subject Re: Mississippi River

Stacia,

I'll have to do a little research and get back to you. I used to do canoe trips on the Mississippi with some people in the Sierra Club every year. Some were on the upper Mississippi and some were on the lower Mississippi. I haven't done this in a while as I bascially regard the Mississippi River as degraded by the levees and the barge traffic can get annoying (and unsafe). There is still a group that goes out annually for a 3-day canoe trip over Memorial Day and also over the Labor Day weekend. I'm sure some of these people will also contact DNR about this.

Jim

Stacia Bax <stacia.bax@dnr.mo.gov> wrote:

Hi Jim,
Thank you for your comments.

Do you have any specific times and locations where you or others have recreated on the Mississippi River below Dam #27 to the Ohio River?

I was wondering if you could more specifically tell me the locations of recreational activities in the water (e.g., where you or others fish, trap, swim, boat, wade, etc.) An example could be, "I have seen people swim near Holiday Island at mile marker XYZ near Wittenberg, MO every weekend from May to September since 1985." The more specific the better.

The comments you made below will be added to the other comments we will receive. They will be presented to the Missouri Clean Water Commission at their meeting in January 2006. We will also be submitting all comments received to the U.S. Environmental Protection Agency for their consideration.

Stacia Bax
Environmental Specialist
MDNR, Water Quality Monitoring & Assessment Section
573-526-7838

"James Rhodes" <jarhodes@sbcglobal.net>

10/29/2005 04:57 PM

To Stacia.Bax@dnr.mo.gov
cc
Subject Mississippi River

Stacia,

I am sending this comment to you as a private citizen even though I am a staff person with DNR in St. Louis. I have read the messages put out by the Missouri Coalition for the Environment regarding the exemption of the three streams in the St. Louis area.

While I can understand why the Commission exempted Maline Creek and the River Des Peres, I am most upset and really don't understand the exemption of the Mississippi River.

I grew up in the City of Pittsburgh and when I lived there as kid, the river was filthy and nobody would dare go into it to swim. Today, when I go back to visit, I see people out in the river in power boats and skiers and the river, I understand, is much cleaner.

I have talked with engineering consultants who have worked around the country and they are just amazed when they find out that MSD is not required to disinfect the discharge from the Bissel Point treatment plant. I have been on the Mississippi River in canoes and I have even swum in the river (although I held my mouth shut and tried to not drink any of the water) and I think it is really just outrageous that we are not going to put MSD on a compliance schedule to require them to disinfect. There is really no good reason to exempt the Mississippi River from the disinfection requirement as far as I can tell.

That is basically it. I predict the EPA will overturn this bad decision. And DNR will look like wimps once again.

Jim Rhodes
815 Brookside Drive
St. Louis, MO 63122

Mississippi River

Mississippi River water standards - Stacia Bax/WPCP/DEQ/MODNR

Schuermann, Mark



"Mark Schuermann"
<mschu@mindspring.com>

11/03/2005 12:03 PM

Please respond to
mschu@mindspring.com

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Mississippi River water standards

Stacia Bax
Use Attainability Coordinator
P.O. Box 176
Jefferson City, MO 65102-0176

Dear Stacia,

I am dismayed by the diminished protection from pollution being proposed for the Mississippi River.

I am an avid canoeist and kayaker and spend time each year on big rivers. I have paddled all of the Mississippi River from Kimmswick, MO,

to Wickliffe, KY, several times. From 1990 to 2005 I have been on this river at least once each year, spending several days on each trip, and camping along the river. It is not possible to paddle the river without being in contact with the water for long periods of time. This includes swimming in the river to keep cool on hot days.

It is important to improve the quality of the water in the Mississippi River. Do not let the standards for water quality drop.

Mark Schuermann
1227 Weatherton Place
Ballwin, MO 63021

Mississippi River

Mississippi River comment - Stacia Bax/WPCP/DEQ/MODNR

Sherburne, Dan



"Dan Sherburne"
<dsherburne@mindspring.co
m>

11/28/2005 11:17 AM

To "stacia.bax@dnr.mo.gov" <stacia.bax@dnr.mo.gov>

cc Liscek.Bonnie@epamail.epa.gov

bcc

Subject Mississippi River comment

To: Clean Water Commission
From: Dan Sherburne, Missouri Coalition for the Environment
Re: Mississippi River (WBID 1707)
Date: 11/28/05

The Missouri Department of Natural Resources committee that reviewed the Use Attainability Analysis for the Mississippi River issued a determination that the information presented was "Inconclusive" and did not support the removal of Whole Body Contact Recreation use. (Two of the three committee members in fact indicated in their reviews that WBCR use was supported by the UAA.) The committee noted evidence of current WBCR use, particularly in the portion from the Chain of Rocks upstream, and stated that WBCR uses downstream from that point, even if less frequent, could not be considered unattainable, based on the UAA. Other issues, such as hydrologic modifications, naturally occurring bacteria, and economic and social impacts, were seen as requiring further study.

Despite the committee's recommendation and its affirmation that WBCR was an existing use of the Mississippi, the Clean Water Commission--without the required public notice and without any additional evidence to support its position--decided to remove WBCR designation on 195.5 miles of the river. The Commission retained WBCR use on the portion between Dam #27 (Chain of Rocks) and the confluence with the Missouri River (a distance of about 5 miles), while removing that use downstream to the Ohio River. This is an extraordinary decision in part because the UAA presented to it covered only the area between the Missouri River and the Meramec River. In other words, the Commission removed WBCR designation on about 158 miles of the river without benefit of the required UAA. Their decision was extraordinary as well because it was done without benefit of the required public notice and participation. We strongly object to the capricious nature of this decision as well as the failure to allow public involvement prior to the decision being made. On the basis of these alone, the removal of WBCR use should be set aside and the recommendation of the committee to retain at least interim WBCR use affirmed.

We have found in contacts with individuals and groups and in documentary and Internet searches abundant evidence of WBCR use on this 195.5-mile stretch of the Mississippi--of group kayak outings, waterskiing, swimming off sandbars, etc. Much of this evidence we and others have submitted under separate cover. It is quite clear that there is existing and longstanding WBCR use of the river--use that should and must, by law, be protected through WBCR designation. We ask that the Commission reverse its decision and afford the mighty Mississippi, and those that use it, that fundamental protection.

Sincerely,
Dan Sherburne

Research Director
Missouri Coalition for the Environment
6267 Delmar Blvd., Ste. 2E
St. Louis, MO 63130
314-727-0600

314-727-1665 (fax)
dsherburne@moenviron.com

Fw: Clean water Act and Mississippi at Chain of Rocks - Stacia Bax/WPCP/DEQ/MODNR



Phil
Schroeder/WPCP/DEQ/MODNR

09/12/2005 08:22 AM

To Stacia Bax/WPCP/DEQ/MODNR@MODNR, Mohsen Dkhili/WPCP/DEQ/MODNR@MODNR

cc

bcc

Subject Fw: Clean water Act and Mississippi at Chain of Rocks

Please place in the UAA file for the Mississippi River.

----- Forwarded by Phil Schroeder/WPCP/DEQ/MODNR on 09/12/2005 08:21 AM -----



Marlene
Kirchner/WPCP/DEQ/MODNR

09/12/2005 07:18 AM

To Phil Schroeder/WPCP/DEQ/MODNR@MODNR

cc

Subject Fw: Clean water Act and Mississippi at Chain of Rocks

I assume you will keep track of this as you are the others?

Marlene Kirchner
Program Secretary
Water Protection Program
(573) 751-6721

----- Forwarded by Marlene Kirchner/WPCP/DEQ/MODNR on 09/12/2005 07:18 AM -----



"Ted Heisel"
<eheisel@moenviron.org>

09/09/2005 08:20 PM

Please respond to
eheisel@moenviron.org

To "Marlene Kirchner" <marlene.kirchner@dnr.mo.gov>, "Phil Schroeder" <phil.schroeder@dnr.mo.gov>

cc

Subject Fwd: Clean water Act and Mississippi at Chain of Rocks

Marlene - please include this in the state's record as well. Thanks, Ted Heisel

Herm Smith <hwsmith@umsl.edu> wrote:

Date: Fri, 09 Sep 2005 19:56:23 -0500

Subject: Clean water Act and Mississippi at Chain of Rocks

From: Herm Smith <hwsmith@umsl.edu>

To: <lisceck.bonnie@epa.gov>, Ted Heisel <eheisel@moenviron.org>

Dear Ms. Lisceck

I am a kayaker and paddle the Chain of Rocks rapids at least 60-70 days a year. I am very concerned about this exemption given Metropolitan St. Louis Sewer District for not insuring the water quality meets EPA standards. I teach kayaking and canoeing and have personally introduced at least 100 paddlers to the Chain of Rocks area. We are a full-body immersion sport so any exemption seriously affects those of us who enjoy paddling this part of the Mississippi River.

Furthermore, I often see people swimming below the rapids on the Illinois side during the Summer and early Autumn. It makes no sense to me to give an exemption to Metropolitan St. Louis Sewer District when it is clear there is a demand for clean water fit for swimming, wading and rolling a kayak. I hope you will reconsider this ill considered exemption.

Yours, Herm Smith

--

Herman W Smith, Ph.D.
Secretary
StreamTeach, Inc.- a 501(c)3 charity since 1993
Box 9155
St. Louis, MO 63117
Phone and fax: 314-725-1907
cell: 314-954-1273

<http://streamteach.org>
<http://nationalpaddlesportcenter.org>

"Their are two mistakes one can make along the path to achievement -- not going all the way, and not starting."

-- The Buddha

Edward J. Heisel
Executive Director
Missouri Coalition for the Environment
6267 Delmar Boulevard
Suite 2E
St. Louis, Missouri 63130
314.727.0600 (office)
314.401.6218 (cell)
314.727.1665 (fax)
www.moenviron.org

Suits, Maryellen

Maryellen Suits
4170 Jannie Lane
House Springs, MO 62951

RECEIVED

2005 JUN 14 PM 12:24

WATER PROTECTION PROGRAM

Division of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

Re: Discharge of nontreated sewage into rivers and streams

Dear Division of Natural Resources:

I learned on the radio news that you are interested in hearing from the public about the above-mentioned matter. Your particular interest seems to be in those waters that are used for recreational purposes.

An acquaintance of mine enjoyed his kayaking journey from St. Louis to near Kansas City on the Missouri River last summer. I have enjoyed water-skiing some years past on the Mississippi River. Most of Missouri's streams and rivers that fishermen and swimmers use flow into our major waterways.

Beyond mere recreational uses, I believe the City of St. Louis takes much of its fresh water supply from the Mississippi before treating and distributing it. Towns south of us do as well, as far as the Mississippi Delta. We have a responsibility to people to protect the water and fishing and agricultural resources, not to mention the seafood industry in the Atlantic Ocean. To fail to disinfect our sewage would be irresponsible and not cost productive. I would rather see our way to preserving our waters as of major importance, despite the fact that sewage costs may rise.

Thank you for considering my input in this matter.

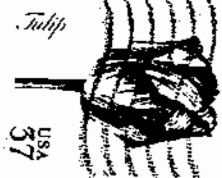
Sincerely,


Maryellen Suits

4170 Jannie Lane
House Springs, MO 63051

SAINT LOUIS MO 631

09 JUN 85 PM 10 T



Stacia? telling A

Division of Natural Resources
P.O. Box 176
Jefferson City, MO 65102

65102+0176



Mississippi River

Kayaking in the Mississippi River - Stacia Bax/WPCP/DEQ/MODNR

Tiefen brun, Katherine



"Katherine Tiefenbrun"
<ktiefenbrun@gmail.com>

11/22/2005 10:00 PM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Kayaking in the Mississippi River

Hello Ms. Bax,

I have kayaked, along with a kayaking group from St. Louis called Streamteach, many times in the Mississippi River, just south of the Chain of Rocks pedestrian bridge. The group frequents this stretch of the river because it is one of the only places in the region that has actual whitewater to boat in. We are always very careful about trying not to flip over in the water, but it inevitably happens, and we think that a couple of people in our group actually became sick from contact with the water. I am sure that there are pictures of us boating if you look hard enough at the information Streamteach has.

I hope this information helps you in your future decisions about disinfection of the water discharged from waste water treatment plants.

Katy Tiefenbrun

Mississippi River

Proposed exemption of the Mississippi River and other streams in St. Louis area - Stacia Bax/WPCP/DEQ/MODNR

Ulman, Nancy



"Nancy Ulman"
<nancy_ulman@hotmail.com>

10/31/2005 03:47 PM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Proposed exemption of the Mississippi River and other streams in St. Louis area

Ms. Bax:

This is to comment on the decision of the Missouri Clean Water Commission to exempt the Mississippi River, among others, from the new state water quality rules that require disinfection of wastewater from sewage treatment plants.

I understand that the U.S. EPA has not yet approved this decision, so I hope to influence the EPA by way of my commentary.

Although mainly to be daredevils, I suspect, people do occasionally water ski in the Mississippi in front of the Arch. I myself have not done this, and would not do so, and unfortunately I cannot cite exact dates; however, I have observed it on more than one occasion. A much more important example is that there is much sailing activity on the so-called Alton Lake in the Mississippi near Alton, IL, and that on nice days, I also commonly have seen water skiing in that vicinity but in the main channel of the Mississippi River.

Note that I do not live particularly near the Mississippi River at all, so if I have seen these occurrences, I cannot help but think they are relatively common on the best weather days of the year that fall on weekends.

I do not think it is wise to allow wastewater from sewage treatment plants to enter into our rivers and streams, even though I understand that the effluent often is cleaner than urban runoff. Sewage treatment outfalls can be controlled much more easily than sheet runoff, also, and I think we should do what is feasible to protect our water.

Nancy Ulman
10706 St. Cosmas Lane
St. Ann, MO 63074

Mississippi River

Clean Water Commission UAA - Stacia Bax/WPCP/DEQ/MODNR

Wilson, David



"David Wilson"
<david.wilson@ewgateway.or
g>

11/02/2005 09:57 AM

To stacia.bax@dnr.mo.gov

cc

bcc

Subject Clean Water Commission UAA

Re: Clean Water Commission

I understand that the Clean Water Commission is considering an exemption on the Mississippi River from Chain of Rocks to the Ohio River.

I want to point out that my family and I have been swimming in the Mississippi River on a couple of occasions when visiting friends who have land on the river just east of Perryville, Missouri. Our friends have a small cabin on what appears to be higher ground just above the river. That cabin flooded in 1993 and 1994. But it is very easy to clean up and has provided them with years of summer recreation as well as a base for in season hunting.

In the summer of 1989, we spent a couple of days there and waded and swam in the Mississippi River. I wondered at the time whether it was a health risk, but the sand bars are so beautiful and the water so tempting, that we just plunged in. We were back a year later for another weekend with the same experience. While we have not been able to join these friends since that time, I have a clear memory of just how wonderful it was to be there. If you need photo documentation, I can probably find a picture of my son by the edge of the water, playing on the sand bar. I am not sure if I took one where he was actually in the water.

I also want to ask just where the proposed exemption will begin, since the confluence of the Missouri and Mississippi is already a tourist attraction for boaters in canoes and kayaks. The kayakers use the Chain of Rocks for adventure kayaking, and of course they occasionally spill. We were out this fall in canoes and one of our companions succeeded in accidentally falling in the water near Confluence point. Moreover, the river from Chain of Rocks to the southern end of the canal is a wonderful recreational area. I expect to see much more boat traffic at North Riverfront Park in the coming years, and the sand bars on Chouteau Island are becoming popular places to explore. Clean water in the Mississippi will provide a huge boost to recreational activity in the St. Louis region; and giving up on the clean water requirements would be a tragic back-step just at the time when the St. Louis community is finding its way back to the rivers.

Thanks for a chance to comment on the Use Attainablility Analysis.

David A. Wilson
450 West Jackson Road
St. Louis, MO 63119
314-962-5811

Yahn-Kramer, Bettie



St. Charles County Government

Parks and Recreation

August 23, 2005

Attn: Marlene Kirchner
Clean Water Commission
Mo. Dept. of Natural Resources
PO Box 176
Jefferson City MO 65102-0176

RECEIVED
2005 AUG 25 PM 12:16
WATER PROTECTION PROGRAM

Dear Ms Kirchner,

I am writing to comment on the "Use Attainability Analysis" for several water bodies in St. Charles County. As a unit of local government that seeks to provide a quality recreation experience in a natural setting, we have a concern for the usability of our natural resources. Most of our acquired or conceived county parks have natural water features. Five of those water features are on the targeted water bodies list; they are the Dardenne Creek, Femme Osage Creek, Peruque Creek, Missouri River and Mississippi River. We also support Spenser Creek, which as a tributary, affects the water quality and usability of Dardenne Creek. In addition, Indian Camp Creek and Big Creek are not on the targeted list but are key features in our park system.

All of the above mentioned water bodies can be accessed from our public parks or affect the water features in our parks. We strive to provide natural oasis's in a rapidly developing county. Our parks are the refuge where families and individuals can experience nature. It is extremely important that the water quality in our parks meet the highest standards. Our parks may be the only place where a child may get to go find crawdads, fish or play in a creek. That is why we support the "Whole Body Contact" or "Swimmable" use designation for the water bodies mentioned in this letter.

Thank you for your time and consideration.

Sincerely,

Bettie Yahn-Kramer
Director of Parks and Recreation



St. Charles County Government

Parks and Recreation

201 North Second Street • Suite 510
St. Charles, MO 63301



SAINT LOUIS MO 631

23 AUG 05 PM 04T

Attn: Marlene Kirchner
Clean Water Commission
Mo. Dept. of Natural Resources
PO Box 176
Jefferson City MO 65102-0176

65102+0176